

(An Autonomous Institution)

B.E- Civil Engineering

CURRICULUM and SYLLABI

[For students admitted in 2023-2024]

B.E / B.Tech Regulations 2023

Approved by BOS and Academic Council meetings

Sona College of Technology, Salem (An Autonomous Institution) Courses of Study for B.E/B.Tech. Semester I under Regulations 2023 (CBCS) Branch: Civil Engineering

S.No	Course Code	Course Title	L	T	Р	J	С	Category	Total Contact Hours	Course Type*			
		Theory Cour	ses										
1.	U23ENG101A	Communication Skills in English	2	0	2	0	3	HS	60	TL			
2.	U23MAT102A	Linear Algebra and Calculus with MATLAB	3	0	2	0	4	BS	75	TL			
3.	U23CHE104A	Chemistry for Civil Engineering	4	0	0	0	4	BS	60	Т			
4.	U23PPR105	Problem Solving using Python Programming	3	0	0	0	3	ES	45	Т			
5.	U23EGR107	Engineering Graphics	3	0	0	0	3	ES	45	Т			
6.	U23TAM101	தமிழர் மரபு / Heritage of Tamils	1	0	0	0	1	HS	15	Т			
7.	U23GE101	Basic Aptitude-I	2	0	0	0	0	AC	30	Т			
		Practical Cou	rses										
8.	U23CHL111A	Engineering Chemistry Laboratory	0	0	2	0	1	BS	30	L			
9.	U23PPL112	Python Programming Laboratory	0	0	2	0	1	ES	30	L			
10.	U23WPL114	Workshop Practice	0	0	2	0	1	ES	30	L			
	1		T	otal	Cre	dits	21						
		Optional Language	Cour	ses*	*								
11.	U23OL1101	French							15	Т			
12.	U23OL1102	German		0	0	0	1	OI.	15	Т			
13.	U23OL1103	Japanese		1	1	1					0L	15	Т
14.	U23OL1104	Korean							15	Т			

*T- Theory, TT- Theory with Tutorial, TL- Theory with Laboratory, TP- Theory with Project, TLP- Theory with Laboratory and Project, L-Laboratory, LT- Laboratory with Theory, LP- Laboratory with Project
**Students may opt for foreign languages viz., German/French/Japanese/Korean with additional one credit. (Not accounted for CGPA calculation)

Approved By

nf. for Jal'22.	Spertur	Mivalluson	J. Juleno7	
Chairperson, Science and Humanities BoS	Chairperson, Civil BoS	Member Secretary, Academic Council	Dean-Academics	Chairperson, Academic Council & Principal
Dr. M. Renuga	Dr. R. Malathy	Dr.R.Shivakumar	Dr.J.Akilandeswari	Dr.S.R.R.Senthil Kumar

Copy to:-

HOD/ Civil Engineering, First Semester B.E. Civil, Students and Staff, COE

Sona College of Technology, Salem (An Autonomous Institution)

	1		1		T	T	T	[Total	Course
S.No	Course Code	Course Title	L	Т	P	I	C	Category	Contact	Type*
								category	Hours	Type
		Theory cou	rses					1		
1.	U23ENG201A	Technical English	2	0	0	0	2	HS	30	Т
2.		Vector Calculus and	12	1				DC		
	023MA1202C	Differential Equations	3	1	0	0	4	BS	60	TT
3.	LIAADINIAAAD	Physics For Civil		+						
	023PHY203B	Engineering	4	0	0	0	4	BS	60	Т
4.	LIDODEEDOCA	Basics of Electrical	2	0	0	0	2	EC	4.5	
	023BEE200A	Engineering	5	0	0	0	3	ES	45	I
5.	LI22CE201	Engineering Mechanics	2	1	0	0	1	DC	(0)	
	023CE201	for Civil Engineering	3	1	0	0	4	PC	60	TT
6.		தமிழரும்	1	1						
	U23TAM201	தொழில்நுட்பமும் /	1	0	0	0	1	HS	15	Т
		Tamils and Technology								8
7.	U23GE201	Basic Aptitude- II	2	0	0	0	0	AC	30	Т
a . n		Practical cou	rses		I		L		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
8.	U23PHL210A	Physics Laboratory	0	0	2	0	1	BS	30	L
. 9.		Basics of Electrical								
	U23BEEL2I3A	Engineering Laboratory	0	0	2	0	1	ES	30	L
÷			To	tal (Cred	lits	20			
		Ontional Language	Com	ROOG	**					
10.	U23OL1201	French - II	Cou	ISES			Т		15	
11.	U23OL1202	German - II							15	
12.	U23OL1203	Japanese - II Korean - II		0	0	0) 1	OL -	15	1 T
13.	U23OL1204							ŀ	15	

Courses of Study for B.E/B.Tech. Semester II under Regulations 2023 (CBCS)

Branch: Civil Engineering

*T- Theory, TT- Theory with Tutorial, TL- Theory with Laboratory, TP- Theory with Project, TLP-Theory with Laboratory and Project, L-Laboratory, LT- Laboratory with Theory, LP- Laboratory with Project

**Students may opt for foreign languages viz., German/French/Japanese/Korean with additional one credit (Not accounted for CGPA calculation)

'on to:			P	Kumar RINCIPAL
Dr.M.Renuga	Dr. R. Malathy	Dr.R.Shivakumar	Dr.J.Akilandeswari	Dr.S.R.R.Senthil
Humanities BoS	Engineering BoS	Academic Council	Dean-Academics	Council & Principal
Chairperson, Science and	Chairperson, Civil	Member Secretary,	Door Academic	Chairperson, Academic
1-4m	Detay	Nivablinas	I Allond	03:80

nd Semester, B.E. Civil Students and Staff, COE

SALEM-636 005

12.01.2024 Version 1.0

Semester 2

B.E/B.Tech Regulations-2023

Sona College of Technology, Salem (An Autonomous Institution) Courses of Study for B.E/B.Tech. Semester I under Regulations 2023 (CBCS) Branch: Civil Engineering

S.No	Course Code	Course Title	L	T	Р	J	С	Category	Total Contact Hours	Course Type*			
		Theory Cour	ses										
1.	U23ENG101A	Communication Skills in English	2	0	2	0	3	HS	60	TL			
2.	U23MAT102A	Linear Algebra and Calculus with MATLAB	3	0	2	0	4	BS	75	TL			
3.	U23CHE104A	Chemistry for Civil Engineering	4	0	0	0	4	BS	60	Т			
4.	U23PPR105	Problem Solving using Python Programming	3	0	0	0	3	ES	45	Т			
5.	U23EGR107	Engineering Graphics	3	0	0	0	3	ES	45	Т			
6.	U23TAM101	தமிழர் மரபு / Heritage of Tamils	1	0	0	0	1	HS	15	Т			
7.	U23GE101	Basic Aptitude-I	2	0	0	0	0	AC	30	Т			
		Practical Cou	rses										
8.	U23CHL111A	Engineering Chemistry Laboratory	0	0	2	0	1	BS	30	L			
9.	U23PPL112	Python Programming Laboratory	0	0	2	0	1	ES	30	L			
10.	U23WPL114	Workshop Practice	0	0	2	0	1	ES	30	L			
	1		T	otal	Cre	dits	21						
		Optional Language	Cour	ses*	*								
11.	U23OL1101	French							15	Т			
12.	U23OL1102	German		0	0	0	1	OI.	15	Т			
13.	U23OL1103	Japanese		1	1	1					0L	15	Т
14.	U23OL1104	Korean							15	Т			

*T- Theory, TT- Theory with Tutorial, TL- Theory with Laboratory, TP- Theory with Project, TLP- Theory with Laboratory and Project, L-Laboratory, LT- Laboratory with Theory, LP- Laboratory with Project
**Students may opt for foreign languages viz., German/French/Japanese/Korean with additional one credit. (Not accounted for CGPA calculation)

Approved By

nf. for Jal'22.	Spertur	Mivalluson	J. Juleno7	
Chairperson, Science and Humanities BoS	Chairperson, Civil BoS	Member Secretary, Academic Council	Dean-Academics	Chairperson, Academic Council & Principal
Dr. M. Renuga	Dr. R. Malathy	Dr.R.Shivakumar	Dr.J.Akilandeswari	Dr.S.R.R.Senthil Kumar

Copy to:-

HOD/ Civil Engineering, First Semester B.E. Civil, Students and Staff, COE

				Cor	mmun	ication Sk	ills in E	nglish		L	Т	Р	I	C
U2	23ENC	3101A	(Con	nmon to	ADS,	AIML, BI	ME, CS	D, CSE,	CIVIL,	2	0	2	0	3
Cours	e Out	comes		LCL	, LLL	, wie i, i i	r, 11 Di	allelles)					0	
At the	end o	of the cou	rse, the	studer	t will	l be able	to							
CO1	: I	Use gramn	natical	compor	nents	effectivel	y in bo	th writte	en and	spoken	commu	nicatio	n	
CO2	2: I	Develop sp	eaking	skills f	or sel	f-introdu	ction, d	leliverir	ng spee	ches and	l techni	cal pres	sentatio	n
CO3	3: I	Demonstra	te effec	ctive list	tening	g skills for	r acade	mic and	l profes	sional p	urpose	s		
CO4	1: V	Write emai	ls and	formal	letters	and buil	ld resu	mes and	l constr	uct para	graphs			
CO5	;: I	Develop sp	eaking	, skills t	oth ir	n terms o	f fluenc	cy and c	omprel	nensibili	ty			
Pre-re	quisit	te:						-	-					
	• K	Knowledge	e and U	ndersta	anding	g of Gran	nmar	· · · · · · · · · · · · · · · · · · ·						
	• F	undamen	tal Lan	guage S	Skills ((LSRW)								
			<u>8.</u>	en gannen Referense		CO/PO,	PSO M	lapping			1 22 July -			
		(3/2	/1 indic	cates the	e strer	ngth of co	orrelatio	on) 3-Sti	, rong, 2-	Mediun	n, 1-We	ak		
COs		1	Program	nme Oı	itcom	es (POs)	and Pro	gramn	ne Spec	fic Out	comes (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	1	1	1	1	1	3	3	2	3	3	2	3	2	3
CO2	1	1	1	1	1	3	3	3	3	3	3	3	3	3
СОЗ	1	2	3	2	2	3	3	2	3	3	3	3	3	3
CO4	1	2	1	2	2	3	3	3	3	3	3	3	3	3
CO5	1	2	2	3	2	3	3	3	3	3	3	3	3	3
					Co	urse Ass	essmer	nt meth	ods					
	8			E	Direct							Indir	ect	
CIE tes	st I (10	0) (Theory)		T	Attendar	nce (5)							
CIE te	st II (1	0) (Theory	7)			Total CIE	E: 50 ma	arks	al allow too					
CIE te	st III (st IV (10) (Theor (10) (Practi	y) cal)			Semester	End E	xamina	tion (50)	Cou	irse end	l surve	y
Assign	nment	/seminar/(Quiz (5)		(SEE – 11 marks)	neory (2	25 mark	s + Lab	(25				
Unit 01	:		an a										6 Hour	
•	Gene	eral vocabi	ulary, F	arts of	Speed	h, Article	es		K	· · · · ·		-		
•	Emai	il, fixing a	an app	ointmer	nt, can	ncelling a	appoint	ments,	confere	ence det	ails, ho	otel acc	ommod	lation,

Paragraph writing – Describing – defining – providing examples or evidences

Jnit 02:			
			6 Hours
 Tenses, Sentence Patterns 			
Instructions			
 Letter Writing - calling for quotations, placing orders 			
Jnit 03:			6 Hours
 Prefixes and Suffixes 			
Cover letter and resume writing			
Jnit 04:			6 Hours
 Modal verbs, concord 			
• Checklist			
 Letter Writing - Business communication, complaints, re 	eplies to queries fro	om busine	ess customers
Jnit 05:			6 Hours
• If conditionals			1
 Letter Writing - inviting dignitaries, accepting and decli 	ining invitations		
Lab component:			
1. Self-introduction, personal information, name, home	background, study	y details,	area of interest
hobbies, strengths and weaknesses, projects and paper pr	resentations, likes	and dislik	tes in food, travel
clothes, special features of home town.			
		es Purcha	ases. Training
2. Mini presentation - Office Arrangements, Facilities, Off	tice Functions, Sal	• 1	
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistant Listeration - Advertising assistant 	nce, applying for a	job.	
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. 	nce, applying for a ogues, taking down	job. phone m	essages, orders,
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form 	nce, applying for a ogues, taking down	job. phone m	essages, orders,
 Mini presentation - Office Arrangements, Facilities, Offi Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading 	nce, applying for a ogues, taking down	job. phone m	essages, orders,
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading 	be Functions, Sal	job. phone m	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours	ace Functions, Sale nce, applying for a ogues, taking down Project:	job. phone m	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistant Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS	Project:	job. phone m Total	essages, orders, Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS 1. Technical English I & II, Dr. M. Renuga et al. Sonaversit	tice Functions, Sale nce, applying for a ogues, taking down - Project: ty, 2016	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS 1. Technical English I & II, Dr. M. Renuga et al. Sonaversit 2. Extensive Reading	tree Functions, Sala nce, applying for a ogues, taking down - Project: ty, 2016	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistant Listening - understanding short conversations or monolonotes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Store of Coords. She is Dancing Back to Life – A Short Story" The Store of Coords. She is Dancing Back to Life – A Short Story" The Store of Coords. She is Dancing Back to Life – A Short Story" The Store of Coords. She is Dancing Back to Life – A Short Story"	the Functions, Sala nce, applying for a ogues, taking down - Project: ty, 2016	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published 	the Functions, Sala nce, applying for a bogues, taking down - Project: ty, 2016	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published 	tice Functions, Sala nce, applying for a ogues, taking down 	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi 	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico 	job. phone m Total	Hours: 60 Hrs
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published Norman Whitby, Business Benchmark – Pre-Intermediate 	 Project: ty, 2016 d by Jaico lished by Jaico e to Intermediate, for the second se	Total Students	Hours: 60 Hrs Book, Cambridge
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. 	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico ie to Intermediate, in the second s	Total Students	Hours: 60 Hrs Book, Cambridge
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Generation (State) She is Communication Skills, P. Kiranmai Dutt, Generation (State) Restantion (State) State) Stat	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico ie to Intermediate, setha Rajeevan, C. 	Total Students L. N. Pra	Hours: 60 Hrs Book, Cambridge
 Mini presentation - Office Arrangements, Facilities, Offi Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published The Story of Senchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Geby Cambridge University Press India Pvt. Ltd. Desting Total Press India Pvt. Ltd. Desting Press Press	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico e to Intermediate, feetha Rajeevan, C. 	Total Students L. N. Pra	essages, orders, Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Offi Recruitment, Advertising, Applying for financial assistan Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Ge by Cambridge University Press India Pvt. Ltd. 	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico te to Intermediate, for the second second	Total Students L. N. Pra	Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistar Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Geby Cambridge University Press India Pvt. Ltd. 	 Project: Project: ty, 2016 d by Jaico lished by Jaico e to Intermediate, feetha Rajeevan, C. 	Total Students I L. N. Pra	Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistar Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published A Course in Communication Skills, P. Kiranmai Dutt, Ge by Cambridge University Press India Pvt. Ltd. 	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico lished by Jaico ie to Intermediate, setha Rajeevan, C. 	Total Students L. N. Pra	Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistar Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Geby Cambridge University Press India Pvt. Ltd. State Story Press India Pvt. Ltd. Story Press India Pvt. Ltd. State Story Press India Pvt. Ltd.	 Functions, Salance, applying for a bigues, taking down Project: ty, 2016 d by Jaico d by Jaico lished by Jaico e to Intermediate, for a bigues, taking down 	Total Total Students L. N. Pra	Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistar Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, publi REFERENCES Norman Whitby, Business Benchmark – Pre-Intermediate University Press, 2006. A Course in Communication Skills, P. Kiranmai Dutt, Ge by Cambridge University Press India Pvt. Ltd. 	 Functions, Salance, applying for a bogues, taking down Project: ty, 2016 d by Jaico lished by Jaico e to Intermediate, for the second s	Total Total Students I L. N. Pra Dr. M Profe	Hours: 60 Hrs Book, Cambridge akash, published
 Mini presentation - Office Arrangements, Facilities, Off Recruitment, Advertising, Applying for financial assistar Listening - understanding short conversations or monolo notes, etc. Listening - entering information in tabular form Loud Reading Theory: 30 Hrs Tutorial: Practical: 30 hours TEXT BOOKS Technical English I & II, Dr. M. Renuga et al. Sonaversit Extensive Reading She is Dancing Back to Life – A Short Story" The Story of Google – Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published The Story of Amazon.com- Sara Gilbert, published A Course in Communication Skills, P. Kiranmai Dutt, Ge by Cambridge University Press India Pvt. Ltd. 	Project: ty, 2016 d by Jaico lished by Jaico e to Intermediate, f eetha Rajeevan, C.	Total Total Students I L. N. Pra Dr. M Profe	Hours: 60 Hrs Hours: 60 Hrs Book, Cambridge akash, published HOD I.RENUGA ssor & Head, lumanities & Lar

B.E / B. Tech Regulations 2023

Sona College of Technology

Department of Mathematics

					B. 1	E. / CIV	IL EN	GINE	RING					
SEM	IESTE	R - I	I INI	TAD AT	CEDD						L	T	P,	
U23N	[AT102	2A	LINI	LAN AL	GEDK	AND	CALCU	LUSW	ITH M	ATLAB	3	0	2 () 4
Cours	se Outc	omes										,		
At the	e end of	f the cou	urse, the	student	will be	able to				4				
CO	l: find	d the ran	nk of the	matrix a	nd solve	e linear s	system o	f equation	ons by d	irect and i	indirect	method	5	
CO	2: app	ly the co	oncepts o	of vector	spaces	and linea	ar transf	ormation	ns in rea	l world ap	oplicatio	ns		2
CO	3: app mat	bly the contrix.	oncepts o	of eigenv	alues ar	nd eigen	vectors	of a real	matrix a	and their p	propertie	s to dia	gonaliz	e the
CO 4	1: find	the Tay	ylor's sei	ies expa	nsion, J	acobians	s and the	maxim	a and m	inima of f	unctions	of two	variabl	es
CO	5: app	ly the ap	ppropriat	e techni	ques of	multiple	integral	s to find	the area	and volu	ime.			
Pre-re	quisite	s:								· · ·				•••••••
	Funda Funda	amentals	s of elem s of calcu	entary a ilus	lgebra			• F • F	undame undame	ntals of gentals of tr	eometry igonome	etry		
		file and	÷			CO/PC), PSO	Mappin	g				- 	
		9 <u>1</u> a	(3/2/1	ndicates	the stre	ngth of	correlati	on) 3-St	rong, 2-	Medium,	1-Weak			
COs Programme Outcomes (POs) and Programme Specific Outcomes (POs) and Programme Specific Outcomes (POs) PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10								fic Outco	mes (PS	Os)				
COL	3	3	2	3	2	100	<u>F07</u>	PUs	P09	P010	POIT	2	PSU	2
CO2	3	3	2	3	2							2	$\frac{2}{2}$	3
CO3	3	3	2	3	2							2	2	3
CO4	3	3	2	3	2							2	2	3
CO5	3	3	2	3	2			199			2	2	2	3
			Co	urse ass	essmen	t metho	ds (The	orv with	1 labora	itory cou	rsel	<u></u>		
				Di	rect			100				Indirec	t	
CIE tes CIE tes CIE tes CIE tes Attend	st I (10) st II (10 st III (10 st III (10 st IV (1 ance (5 ment/O	(Theory) (Theory) (Theory) (Theory) (Prac) uiz/Serr	y) ry) ory) tical) ninar (5)		Total Seme [SEE	CIE: 50 ster End - Theory) marks l Examin 7 (35) + 1	nation (5 Lab(15)	0) marks]		Cours	se end s	urvey	
Jnit 01	LIN	EAR SY	YSTEM	OF EQ	UATIO	NS							9 H	lours
Rank o Jacobi	of a mat and Ga	trix – so uss-Seid	lution of lel metho	linear s	system o	of equation	ons by r	natrix m	ethod, (Gauss elin	nination	, Gauss	-Jordan	, Gauss
nit 02	VEC	CTOR S	PACES										9 H	Iours
Vector matrix	space - associa	 linear ited with 	indepen a linear	dence ar map – r	nd deper ange and	ndence o d kernel	f vector of a line	s – basi ar map.	s – dim	ension – 1	inear tra	insform	ations (maps) -
nit 03	EIG	ENVAI	LUES A	ND EIG	ENVE	TORS						-	9 H	Iours
Eigenv – diago	alues a onalizat	nd eigen ion of re	vectors al symm	of real n etric ma	natrices -	- proper	ties of e	igenvalı	ies and	eigenvect	ors – Ca	yley-Ha	milton	theorem

BoS Date: 08. 07. 2023

B.E / B.Tech Regulations 2023

Unit 04	MULTIVARIABLE CALCULUS	9 Hours									
Functi two va minim	ons of several variables – partial differentiation – total derivative – Jacobians – Taylor's theorem ariables – maxima and minima of functions of two variables without constraints – constraint a by Lagrange's method of undetermined multipliers.	for functions of ned maxima and									
Unit 05	MULTIPLE INTEGRALS	9 Hours									
Doubl double	e integrals – change of order of integration – change of variables from Cartesian to polar coor integrals in Cartesian coordinates – triple integrals – volume as triple integrals in Cartesian coor	dinates – area as dinates.									
	List of MATIAR Drogroms	41 									
1	Drograms based on elementary energians on matrices										
1.	Computing the contract of a matrix										
2.	Finding eigenvalues and eigenvectors of a matrix										
3.	Finding eigenvalues and eigenvectors of a matrix										
4.	Finding partial derivatives of functions of several variables										
5.	Computing stationary points of functions of two variables										
6.	Taylors series expansion of functions of two variables										
7.	Evaluating double integrals										
8.	8. Finding area as double integrals										
9.	Evaluating triple integrals										
10.	Finding volume as triple integrals	и.									
Theor	y: 45 Hrs Tutorial: - Practical: 30 Hrs Project: Total He	ours: 75 Hrs									
TEXT	BOOKS:										
1.	T. Veerarajan, "Linear Algebra and Partial Differential Equations", McGraw Hill Publishers, 1	'Edition, 2018.									
2.	T. Veerarajan, "Engineering Mathematics for Semesters I & II", McGraw Hill Publishers, 1st Ed	lition, 2019.									
3.	 W. Yang, Y. K. Choi, K. Jaekwon, M. C. Kim, H. J. Kim and T. Im, "Engineering Mathematics with MATLAB", CRC Press Publishers, 1st Edition, 2017. 										
REFE	EFERENCE BOOKS:										
1.	1. S. Lipschutz and M. L. Lipson, "Linear Algebra", McGraw Hill Publishers, 6th Edition, 2018.										
2.	2. E. Kreyszig, "Advanced Engineering Mathematics", Wiley Publishers, 10th Edition, Reprint, 2017.										
3.	3. C. Prasad and R. Garg, "Advanced Engineering Mathematics", Khanna Publishers, 1 st Edition, 2018.										
4.	4. B. V. Ramana, "Higher Engineering Mathematics", McGraw Hill Publishers, 29" Reprint, 2017.										
5.	5. B. S. Grewal, "Higher Engineering Mathematics", Khanna Publishers, 44th Edition, 2018.										
6.	D. Xu, "Calculus problem solutions with MATLAB", Walter de Gruyter Publishers, 1st Edition	, 2020.									

or

Dr. S. JAYABHARATHI Head / Department of Mathematics Sona College of Technology Salem – 636 005

BoS Date: 08. 07. 2023

Dr. S. JAYABHARATHI ASSOCIATE PROFESSOR & HEAD DEPARTMENT OF MATHEMATICS, SONA COLLEGE OF TECHNOLOGY, SALEM-636 005. Tamilnadu. Ph: 0427 - 4099999.

Dr. M. RENUGA BoS - Chairperson Science and Humanities Sona College of Technology Salem – 636 005

B.E./B.Tech Regulations 2023

Department of Humanities & Languages, Sona College of Technology, SALEM - 636 005.

U	U23CHE104A CHEMISTE					OR CIV	II. FNO	INFE	NC	L	T	P	J	C
				1211110		OACIV	IL LIN	3119661	MING.	4	0	0	0	4
Cours	se Ou	tcomes												
At the	e end	of the cou	rse, the	e studer	nt will	be able	to							
CO	1:	Analyse the	ie impu tic and	irities o industr	f wate ial use	r, their r s.	emovaľ	metho	đs anđ (explain	the con	đitionir	ig meth	ođs
CO	2:	Outline the methods.	e princi	iple and	l appli	cations of	of electr	ochemi	stry, ty	pes of c	orrosio	n and it	s contro	ol
CO	3:	Compare t and compa	he type are the	es of po various	lymeri types	zation ro of fibre	eactions	s, techn ced poly	iques, f	abricatio mposite	on meth e mater	nods of ials.	polyme	rs
CO	4:	Analyze th	ie comp	position	, prop	erties an	d indus	strial ap	plicatio	ons of er	ngineeri	ing mat	erials.	
CO	5:	Describe tl	ne ingre	edients,	manu	facture,	propert	ies and	applica	ations o	f constr	uction 1	materia	ls.
Pre-re	quisi	ite: Basic k	nowled	lge on t	he con	cepts of	organic	, inorga	anic and	1 physic	al chen	nistry.		
N -														
						CO/PO,	PSO M	lapping	3					
18 18		(3/2	/1 indic	cates the	e stren	gth of co	orrelatio	on) 3-St	rong, 2-	Mediur	n, 1-We	ak		
COs			Program	nme Oı	atcom	es (POs)	and Pro	ogramn	ne Spec	ific Out	comes (PSOs)		
	PO	1 PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	3	2					3							2
CO2	3	2		-			2							2
CO3	3	2		- 94 -		-	1							2
CO4	3	2		140	-		2							2
CO5	3	2					2							2
					Co	urse Ass	essmer	nt meth	ods		1			
				Ľ	Direct							Indir	ect	
CIE te CIE te CIE te	est I (8 est II (est III	5) 8) (8)				Objectiv Attendar Total CII	es Test nce (5) E: 40 ma	(6) arks			Сот	urse enc	l survey	y
Assign	nmen	t/seminar/	Quiz (5)		Semester	r End E	xamina	tion (60)				
Unit 0)1: W.	ATER TEC	HNOL	.OGY								12 Hours		
Introd estima condit	luctio ation tionin	n - Charao - Boiler fe g (colloida	cteristic ed wat	cs – han er – re phate, i	dness quiren	– estim nents – o and car	nation o disadva bonate	of hard ntages conditi	ness by of usir	EDTA g hard	metho water	d, alka in boile ernal o	linity a ers – in ondition	nd its ternal

conditioning (colloidal, phosphate, calgon and carbonate conditioning methods) – external conditioning – zeolite process, demineralization process, desalination of brackish water by reverse osmosis - Domestic water treatment – screening, sedimentation, coagulation, aeration, sand filtration and disinfection methods - Chlorination, ozonation and UV treatment.

Unit 02: ELECTROCHEMISTRY AND CORROSION

Electrode potential – Nernst Equation – derivation and problems based on single electrode potential calculation – reference electrodes – standard hydrogen electrode – calomel electrode – Ion selective electrode – glass electrode – measurement of pH – electrochemical series – significance – electrolytic and electrochemical cells – reversible and irreversible cells – EMF – measurement of emf – potentiometric titrations (redox – Fe2+ vs dichromate) – conductometric titrations (acid-base – HCl vs NaOH) – Corrosion – types – dry and wet corrosion – examples – Corrosion control methods – Sacrificial anode and impressed cathode current method.

Unit 03: POLYMERS AND COMPOSITES

Nomenclature of Polymers - classification of Polymers – functionality – types of polymerization-additioncondensation and copolymerization – Free Radical mechanism of addition Polymerization – Properties of Polymers – glass transition temperature, Tg - Methods of Polymerization-bulk and solution methods -Plastics – Moulding constituents of plastic – Moulding of plastics into articles-Injection-Compression and Blow moulding – Thermoplastic and Thermosetting resins – Rubbers-types-applications-vulcanization of rubber - Composites – definition, constituents of composites – composition, properties and applications of various fibre reinforced polymer (FRP) composites.

Unit 04: CHEMISTRY OF ENGINEERING MATERIALS

Refractories – classification – acidic, basic and neutral refractories – properties (refractoriness, refractoriness under load, dimensional stability, porosity, thermal spalling).

Abrasives – natural and synthetic abrasives – quartz, corundum, emery, garnet, diamond, silicon carbide and boron carbide.

Ceramics - Introduction - components of ceramics – classification of ceramic materials –general methods of fabricating ceramic wares-applications of ceramics.

Adhesives - Introduction-requisites of a good adhesive-advantages and disadvantages of adhesive bonding- adhesive action-classification of adhesives-industrial applications of adhesives.

Unit 05: CHEMISTRY OF BUILDING MATERIALS

12 Hours

Lime – classification – manufacture and properties of lime – Cement – classification – Portland cement – chemical composition – manufacture of Portland cement by wet process - setting and hardening – analysis of cement – concretes – hot and cold weathering of concrete, cement and its prevention methods – special cements - gypsum – plaster of Paris – Glass - manufacture, types, properties and uses – special paints and their applications in construction sector – Green building materials – Introduction and their salient features.

Theory: 60 Hrs	Tutorial:	Practical:	Project:	Total Hours: 60 Hrs
TEXT BOOKS				

 P.C.Jain and Monica Jain, "Engineering Chemistry" Dhanpat Rai Pub, Co., New Delhi, 17th Edition, 2018.

12 Hours

12 Hours

12 Hours

2.	Wiley Editorial Board, "Wiley Engineering Chemistry", 2nd Edition, Wiley India Pvt.Ltd, New Delhi, Reprint 2019.
REFE	RENCES
1.	O G Palana, Engineering Chemistry", Tata McGraw Hill Education (India) Private Limited, Chennai, Second Edition, 2017.
2.	B.Sivasankar, "Engineering Chemistry", Tata McGraw-Hill Pub. Co. Ltd., New Delhi (2008).
3.	B.K. Sharma, "Engineering Chemistry", Krishna Prakasan Media (P) Ltd., Meerut (2001).
4.	N. Krishnamurthy, K. Jeyasubramanian and P. Vallinayagam, "Applied Chemistry", Tata McGraw- Hill Publishing Company Limited, New Delhi (1999).

Chut

Dr. C. SHANTHI, M.Sc., M.E., Ph.D. Professor of Physics Head, Department of Sciences Sona College of Technology (Autonomour SALEM-636 005.

af funt

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 005.

B.E./ B. Tech Regulations 2023

				ENG	INEE	RING (CHEM	ISTRY		L	T	P	J	C
U	23CH	L111A			LA For C)	BORA I	ineerin	lg)		0	0	2	0	1
Cou	se Ou	tcomes			(c	,	8/						
At th	e end	of the c	ourse, the	e studer	nt will	be able	to							
CO	1:	Analyse	the giver	n water	sample	e to dete	rmine t	he amo	unt of l	narđnese	and all	kalinity	<i>.</i>	
CC)2:	Analyse	the quali	ty of br	ass by	estimati	ng copp	per and	estima	te the an	nount o	f HCl i	n given	
		sample	water by	pH met	ry and	conduct	tometry							
СС)3:	Estimate weight o	the amo of water s	unt of c oluble p	alcium oolyme	oxide in r.	n the gi	ven cen	nent sai	nple and	d deterr	nine th	e molec	cular
Pre-r	equisi	ite: Capa	ble of har	ndling p	oipette,	burette,	standa	rd mea	suring	flask and	d conica	al flask.		
		(3/2/1 indi	cates the	e stren	CO/PO, gth of co	PSO M	lapping on) 3-Sti	s rong, 2-	Mediun	n, 1-We	ak		
COs			Progra	mme Or	utcome	es (POs)	and Pro	ogramm	ne Spec	ific Outo	comes (PSOs)	DCO1	DCO
CO1	PO		2 103	1	P05	1	PO/	PO8	1	PO10	POII	POIZ	P501	2
	3	2				1								2
CO2	3	2		1		1			1					2
CO3	3	2		1		1			1		6 2	19. 19 19.		2
					Co	urse Ass	sessmer	nt meth	ods					
	and P	had a	an an Ara An Ara		Direc	:t				т., С		Inc	lirect	
CIE	test I (15)				RTPS (10))							
Quiz	:1 (5)				1	Record (10)						nd aur	
CIE	test II	(15)			1	Fotal CI	E:60 ma	irks				oursee	enu surv	/ey
Quiz	2 (5)				5	Semester	r End E	xamina	tion (40) marks)				
LIST	OF E	XPERIM	ENTS	э.										
1	Estin	nation of	hardness	of wate	er samj	ple by El	DTA m	ethod.						
2	Estin	nation of	alkalinity	of wat	er sam	ple by ir	ndicator	r metho	d.					
3	Estin	nation of	copper ir	n brass t	oy EDT	A meth	od.	197						
4	Estin	nation of	HCl acid	by pH	metry.					-				
	4.8	2023	ersion I.0		Program	nme:			B	E/BTe	ch Regu	lations 2	2023	-

5	Estimation of HCl by conductometry. (HCl vs NaOH)	
6	Estimation of Calcium Oxide in Cement.	
7	Estimation of ferrous ion by potentiometric titration.	
8	Determination of molecular weight of a polymer by viscosity measuremer	its.
		TOTAL: 30 HOURS

Coult

Dr. C. SHANTHI, M.Sc., M.E., Ph.D., Professor of Physics Head, Department of Sciences Sona College of Technology (Autonomous) SALEM-636 005.

affante

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 005.

Programme:

B.E / B. Tech Regulations 2023

		and the second defension of	1										1	1
			PRO	OBLEN	A SOI	VING	USIN	G PYTI	HON	L	T	P	J	C
U	23PPR1	.05	(Comm	ton to AD	PRO S, IT, CS EEE, ME	E, CSE(AII) CH and MC	MINC ML), CSD CT Branch	, CIVIL, B nes)	ME, ECE,	3	0	0	0	3
Cours	e Outco	mes	1											
At the	end of	the cou	rse, the	studen	t will	be able	to							
C01	: De	velop a	lgorithr	nic solu	tions t	o simple	compi	utationa	l probl	ems				
CO2	: W1	rite simp	ole Pyth	ion prog	grams							e The and the second state of the second		
COS	8: W1	rite prog	grams w	vith the	variou	is contro	l staten	nents ar	nd hand	tling str	ings in	Python		
CO4	l: De	velop P	ython p	orogram	ns usin	g functio	ons and	files						
COS	5: An	alyze a	probler	n and u	se app	propriate	data si	tructure	s to sol	ve it.				
Pre-re	quisite:	NIL								7				
	•				(all a said								-	
		(2)	1/1 in dia	ratas th		CO/PO,	PSO M	lapping	5	Madium	m 1 1470	l.		
		(3/2	Program	nme Oi	e stren	$\frac{gtn of cc}{gtn}$	and Pro	$\frac{1}{2}$	rong, 2	ific Out	n, 1-we	PS()		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	3	1	1									1
CO2	2	2	3	1	1									1
CO3	2	2	3	1	1									1
CO4	2	2	3	1	1									1
CO5	2	2	3	1	1					and and				1
					Co	urse Ass	essmer	nt meth	ods					ana an
				I. I	Direct							Indir	ect	
CIE te CIE te CIE te	st I (8) st II (8) st III (8)					Objective Attendar Total CII	es Test nce (5) E: 40 m	(6) arks			Cor	urse end	l surve	у
Assig	nment/s	eminar/	Quiz (5)		Semester	r End E	xamina	tion (60))		4		
Jnit 01	: ALGC	DRITHN	AIC PR	OBLEN	1 SOL	VING							9 Hou	s
Need	for con	nputer l	languag	ges, Alg	orithn	ns, build	ling blo	ocks of	algorit	hms (st	atemen	ts, state	e, contr	ol
flow, solvin	function g. simp	ns), not le strate	ation (j gies for	pseudo develo	code, ping a	flow ch lgorithm	nart, pi ns (itera	ogramition, re	ning la	anguage	e), algoi	rithmic	proble	m
In:+ 07	. PACIO		VTUO		CDAN			-				1	0 1101	
Juit 02	: DASI	.5 OF P	TINO	NPRO	GRAN	IMING			(*)				9 1100	
Introd expres print f	luction- ssions, s function	Python statement, Forma	Interpr nts, pre atting nu	eter-Int ecedenc umbers	eractiv e of o and st	ve and s perators rings, in	cript n , Multi nplicit/e	node -V iple ass explicit	alues a ignmen type co	nd typ nts, con nversio	es, vari nments, n.	ables, c input	perator functio	rs, on,
Jnit 03	CONT	ROL S	TATEM	IENTS	AND	STRING	GS						9 Hou	rs
Condi break,	itional (i continu	if), alter ue, pass,	native (, else. St	if-else), rings-S	chain tring s	ed condi lices, im	tional (mutabi	if-elif-e lity, stri	lse). Ite ing met	ration-v hods ar	vhile, fo id opera	or, infinations.	ite loop),
	4.8.202	23 Ver	sion I.O		Progr	ammer: Bl	E&BTe	ch		B.E / B	Tech Re	gulations	2023	
									M					
								J.	du	ani	$) \Box$	\sim		
							DI	. J. A	KILA	NDE	SWAI	R1		
							Der	artment	of Infor	mation T	AD			

1.

Dr. J. AKILANDESWARI PROFESSOR & HEAD Department of Information Technology SONA COLLEGE OF TECHNOLOGY SALEM-636 005

Unit 0	4: FUNCTIONS, FI	LES AND MODU	ILES		9 Hours
Funct argui recur	tions - Introduction ments, default argu sion. Files -Text files	, inbuilt function ments, keyword s, reading and wri	s, user defined f arguments, retu ting files. Module	unctions, passing rn values, local s s – create – import	parameters - positional scope, global scope and
Unit 0	5: DATA STRUCTU	JRES: LISTS, SET	rs, tuples, dic	TIONARIES	9 Hours
Lists- creati retur	creating lists, list op ing sets, set operation n value- Dictionaries	perations, list me ons. Tuples-Tuple s-operations and r	thods, mutability assignment, Oper nethods, Nested I	list functions, sea rations on Tuples, Dictionaries, Unior	rching and sorting, Sets- lists and tuples, Tuple as Operation.
I	Theory: 45 Hrs	Tutorial:	Practical:	Project:	Total Hours: 45 Hrs
TEXT	T BOOKS				
1.	Reema Thareja, "I Edition 2023.	Problem Solving a	and Programming	with Python" Ox	ford University Press, 2 nd
REFE	RENCES			n and and have been also and also and also	
1.	Ashok Namdev K Python" Mc-Graw	Camthane, Amit A Hill Education, 2	Ashok Kamthane, 018.	"Programming an	d Problem Solving with
2.	Charles Dierbach, Solving Focus" W	"Introduction to iley India Edition	Computer Scienc, 2013.	e using Python: A	Computational Problem
3.	Allen Downey, "" Edition 2016.	Think Python: H	ow to Think Lik	e a Computer Sc	ientist" O'Reilly Media, 2nd
4.	Timothy A. Budd,	"Exploring Pytho	n" Mc-Graw Hill	Education (India)	Private Ltd., 2015.

J.G Dr. J. AKILANDESWARI

PROFESSOR & HEAD Department of Information Technology SONA COLLEGE OF TECHNOLOGY SALEM-636 005

τ	23PPL	112		РҮТ	HON LA	PROG BORA	RAMN FORY	AING			T	P	J	C
			(Comn	non to AD	S, IT, CS EEE, MEC	E, CSE(AI CH and M	ML), CSD, CT Branch	, CIVIL, B 1es)	ME, ECE,	0	0	2	0	1
Cours	e Outco	omes												
At the	end of	the cou	rse, the	studer	nt will l	be able	to							
CO1:	Im	plemen	t the alg	gorithm	s using	, basic c	ontrol s	tructure	es in Py	thon				
CO2:	De	evelop P	ython p	orogram	ns to us	e functi	ons, stri	ings and	d data s	structur	es to so	lve diff	erent	
CO3:	Im	ples or pl	t persist	tent sto	ring inf	formatio	on throu	ıgh file	operati	ions				
Pre-re	quisite	: NIL												
							DEO M							
		(3/2	0/1 india	rates the	e strend	oth of co	PSO M	apping	5 1011 0 -	Mediur	n 1-We	ak		
		(0/2	Program	nme Oi	utcome	s (POs)	and Pro	ogramn	ne Spec	ific Out	comes (PSOs)		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO
CO1	3	2	2	3	2	1								1
CO2 CO3	3	3	3	3	2	2								$\frac{1}{1}$
		1	I		Cou	urse Ass	sessmer	nt meth	ods					
				I	Direct							Indir	ect	
Quiz I CIE te Quiz I	- (5) st II (15 I- (5))			Recor Total Seme	d (10) CIE: 60 ster Enc	marks l Exami	nation ((40 mar	·ks)	Cor	urse en	d surve	У
	1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Draw flo Impleme Impleme Develop concater Impleme Impleme Develop	ent prog ent vario ent vario ent vario pythom nation, s ent user ent recu ent recu ent pythom ent dicti	using a grams w ous bra ous loo n progra licing, i defined rsion u non progra onary a	any ope vith sim nching ping sta ams to p indexin d funct sing py gram to ams to p and set	en sourd nple lan statement atement perform g. ions usi vthon. o perfor perform in pyth	e softw guage f ents in p ts in pyt variou ing pyth m operat on.	are. eatures. bython. hon. s string non. ations o ions on	operat on file a list and	ions like nd mod d tuples	e ule.			•
	Theory	:	T	utorial:		Practica	al: 30Hr	s I	Project:		To	tal Hou	rs: 30 l	Is
	4.8.20	23 Ver	sion I.O		Progra	mmer: Bl	E&BTe	ch		B.E / B	Tech Re	gulations	2023	
									Dr.	J. AK	LUON ILAN SSOR	DEST & HEA	WARI	

• W

PROFESSOR & HEAD Department of Information Technology SONA COLLEGE OF TECHNOLOGY

0.

			1								—	D	T	
U	23EG	R107		EN	GINEE	RING	GRAPI	HICS		L 3	0	P	J	2
Cours	e Out	comes	<u> </u>											
At the	e end o	of the cou	rse, the	studen	t will b	e able	to	0		1				
601		Construct	Filips	Parah	ola Hy	perbola	Cyclo	ide and	Involu	tos			ar and a	
<u> </u>		Draw the r	oroiectio	on of Pc	ont Lir	e and I	Plane si	irfaces	nivoiu				1	
CO2	$\frac{2}{2}$	Draw the r	projectio	on of sit	nple so	lids by	rotating	a object	metho	d.				
CO.	1. I	Develop th	ne sectio	on of sir	nple so	lids and	l lateral	surface	e of tru	ncated s	olids.			
CO	5. I	Draw the i	sometri	c view	to ortho	ographi	c projec	ction.						* * 2
Pre-re	quisi	e: Nil				0 1	1 ,		-				1	
					C	CO/PO,	PSO M	lapping	5				direa (
		(3/2	2/1 india	cates the	e streng	th of co	orrelatio	on) 3-Sti	rong, 2-	Mediun	n, 1-We	ak		
COs	DOI	DOD	Program	nme Ou	itcomes	(POs)	and Pro	ogramm	ne Spec	ific Outo	comes (PSOs)	DCO1	DECO
	POI	. PO2	PO3	PO4	P05	PO6	P07	POS	P09	POIO	POII	POIZ	19501	P502
CO1	1							3	0. 	2			1	
CO2					3			2		2		2		2
CO3	de la composición de la compos				3			2		2		2	1	2
CO4					3			2		2		2	1	2
CO5			2					2		2		2	1	
1					Cou	rse Ass	essmer	nt meth	ods				and the second second second	
				E	Direct	19						Indir	ect	
CIE te CIE te CIE te Assign	est I (8 est II (8 est III (nment) 3) 8) /seminar/	Quiz (5)	C A T Se	bjective ttendar otal CII emester	es Test nce (5) E: 40 ma End E	(6) arks xamina	tion (60)	Cοι	irse enc	l survey	7
CON Impor	CEPTS	6 AND CO	ONVEN cs in er	NTIONS ngineeri	S - (Not ng app	for Exa	aminat s - Use	ion). of drai	fting in	strumer	nts - BIS	5		
conve Letter	ntions	and spend	ecificationing.	ons —	Size,	layout	and fo	lding o	of drav	ving sh	eets —			
IIn:+ 0	11. DI	ANE CUD	WEG	Marrie	1 day 61								9 Hour	s
Basic	Geon	netrical co	onstruct	tions, C	urves	ng). used i	n engi	neering	practi	ces: Co	nics –			51) (15)
Const	ructio	n of ellips	e, paral	ola and	l hyper	bola by	eccent	ricity m	ethod -	- Const	ruction			
of cyc	loid -	- constru	ction of	Involu	te of ci	rcle –	Drawin	ng of ta	ingents	and no	rmal to			
the ab	ovect	irves.												

4.8.2023 Version 1.0

Programme: B.E - Mechanical Engineering

9 Dr. D. SENTHIL KUMAR, M.E., Ph.D **PROFESSOR & HEAD** DEPT. OF MECHANICAL ENGG. SONA COLLEGE OF TECHNOLOGY JUNCTION MAIN ROAD, SALEM-5,

Unit 02: PROJECTION OF POINTS, LINES AND PLANE SURFACES (CAD	10 ¹⁰
software).	
Orthographic projection- principles-principal planes-rist angle projection-projection of	0 Hours
points. Projection of straight lines (only First angle projections) inclined to boilt the	9 110015
principal planes -Determination of true lengths and true inclinations by folding line	
method. Projection of planes (polygonal and circular surfaces) inclined to one of the	-
principal plane by rotating object method.	
Unit 02: PROJECTION OF SOLIDS (CAD software)	
Projection of simple solids - prisms, pyramids, cylinder and cone, when the axis is	
inclined to one of the principal planes and parallel to the other by change of position	9 Hours
method.	
Unit 04: PROJECTION OF SECTIONED SOLIDS AND DEVELOPMENT OF	
SURFACES (CAD software).	
Section of solids in simple vertical position when the cutting plane is inclined to one of	9 Hours
the principal planes and perpendicular to the other – (obtaining true shape of section	
is not required). Development of lateral surfaces of truncated solids – Prisms,	14 15
pyramids cylinders and cones.	
Unit 05: ISOMETRIC TO ORTHOGRAPHICS PROJECTION- (Manual drafting).	
Representation of three dimensional objects – General Principles - Need for importance	
of multiple views – First angle projection – layout of views – Conversion of isometric	
view to orthographic views	
view to orthographic views.	9 Hours
Practicing three dimensional modelling of simple objects using CAD Software (Not for	
reactioning three dimensional moderning of simple objects damig Crib Software (Not 101	
examination,	
Theory 45 Has Testaviah Brastianh Projects Total	Hours: 45 Hrs
Theory: 45 Firs Tutorial: Flactical: Troject Total	1110415. 45 1115
TEXT BOOKS	
1. Bhatt N.D. and Panchal V.M., "Engineering Drawing", Charotar Publishing He	ouse, 53rd Edition,
2019.	
2. Natrajan K.V., "A Text Book of Engineering Graphics", Dhanalakshmi Publishers	, Chennai, 2018.
3. Parthasarathy, N. S. and Vela Murali, "Engineering Drawing", Oxford University	Press, 2015
4. P.Suresh., "Engineering Graphics and Drawing", Sonaversity, Sona Colleg	e of Technology,
Salem, Revised edition, 2012.	

Programme: B.E - Mechanical Engineering

2

Regulations 2023

Dr. D. SENTHIL KUMAR, M.E., Ph.D PROFESSOR & HEAD DEPT. OF MECHANICAL ENGG. SONA COLLEGE OF TECHNOLOGY JUNCTION MAIN ROAD, SALEM-5.

REFE	RENCES
1.	BasantAgarwal and Agarwal C.M., "Engineering Drawing", McGraw Hill, 2nd Edition, 2019.
2.	Gopalakrishna K.R., "Engineering Drawing" (Vol. I&II combined), Subhas Publications, Bangalore, 27thEdition, 2017.
3.	Luzzader, Warren.J. and Duff, John M., "Fundamentals of Engineering Drawing with an introduction
	to Interactive Computer Graphics for Design and Production, Eastern Economy Edition, Prentice Hall
•	of India Pvt. Ltd, New Delhi, 2005.
4.	Parthasarathy N. S. and Vela Murali, "Engineering Graphics", Oxford University, Press, New Delhi,
	2015.
5.	Shah M.B., and Rana B.C., "Engineering Drawing", Pearson Education India, 2nd Edition, 2009.
6.	Venugopal K. and Prabhu Raja V., "Engineering Graphics", New Age International (P) Limited,
	2008.

Dr. D. SENTHIL KUMAR, M.E., Ph.D PROFESSOR & HEAD DEPT. OF MECHANICAL ENGG. SONA COLLEGE OF TECHNOLOGY JUNCTION MAIN ROAD, SALEM-5.

4.8.2023 Version I.0

Programme: B.E - Mechanical Engineering

T	32337	DT 114		TAT	OBVO		DACT	ICE		L	T	P	J	C
U	23 VV 1	rL114		vv	UKK5	HOP P	RACI	ICE		0	0	2	0	1
Cours	e Ou	tcomes			2. may 11			8 .j				Deb		
At the	end	of the cou	rse, the	studen	t will b	oe able	to							
CO1		Perform th	e vario	us techi	niques	of sheet	metal f	abricat	ion.					
CO2	2:	Analyse va	rious te	echniqu	ies of w	velding	and car	pentry	works.					
COS	3:	Solve the r	eal-time	e proble	ems usi	ng shee	t metal	weldir	ng and	carpenti	ry.	يەرى ئىرىك بىلىيىتىنى مەرىپىيىنى	- i	
Pre-re	quisi	ite: Nil		÷										
					(CO/PO,	PSO M	apping	5					
 		(3/2	/1 indic	ates the	e streng	$\frac{1}{100}$	orrelatio	on) 3-Sti	rong, 2-	Medium	n, 1-We	ak	<u>a a a</u>	
COs	PO	1 PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	1							3				2	2	
CO2	1							3				2	2	
CO3	1							3				2	2	
	and set of the				Cou	rse Ass	essmer	t meth	ods					
				E	Direct							Indir	ect	
CIE te Quiz I CIE te Quiz I	st I (1 - (5) st II (II- (5)	15) (15)			R R T S n	TPS (10 Record (Total CII emester narks))) 10) E: 60 ma : End E:	arks kamina	tion (40		Сот	urse enc	l surve	У

Programme: B.E - Mechanical Engineering

Importance of workshop practice- Introduction to Measuring and marking devices, Tools and equipment Maintenance - Workshop apparatus - Human safety practices - First aid procedures. (Not for Examination)

LIST OF EXPERIMENTS

			o nours
Making of Cone, Dus	st Pan and Funnel.	ž.	
WELDING			8 hours
Arc welding of Butt j	oint and Lap Joint.		
CARPENTRY		8	hours
Making of Half Lap j	oint and Dovetail Joi	int.	
FOUNDRY PRACT	ICES	61	hours
Simple pattern makin	g		1
			Total Number of hours: 30
Tutorial: 0	Practical: 30 Hrs	Project: 0	Total Hours: 30 Hrs
	Making of Cone, Dus WELDING Arc welding of Butt j CARPENTRY Making of Half Lap j FOUNDRY PRACT Simple pattern makin	Making of Cone, Dust Pan and Funnel. WELDING Arc welding of Butt joint and Lap Joint. CARPENTRY Making of Half Lap joint and Dovetail Joi FOUNDRY PRACTICES Simple pattern making Tutorial: 0 Practical: 30 Hrs	Making of Cone, Dust Pan and Funnel. WELDING Arc welding of Butt joint and Lap Joint. CARPENTRY Making of Half Lap joint and Dovetail Joint. FOUNDRY PRACTICES Simple pattern making Tutorial: 0 Practical: 30 Hrs Project: 0

Dr. D. SENTHIL KUMAR, M.E., Ph.D PROFESSOR & HEAD DEPT. OF MECHANICAL ENGG. SONA COLLEGE OF TECHNOLOGY JUNCTION MAIN ROAD, SALEM-5.

4.8.2023 Version 1.0

Programme: B.E - Mechanical Engineering

		-							
U23TA	AM101		தமிழர்	மரபு / Heritage of Tamils	L 1	T 0	P 0	J	C
Course Or	utcomes	1						L	
At the one	l of the cour	rea tha	student w	ill be able to					
At the end		130, 110	Student W						
CO1:	Describe 1	amil La	nguage an	d Literature					
CO2:	Analyse H	leritage	- Rock Ar	t Paintings 10 Modern Art – Sculp	ture				
CO3:	Explain Fol	lk and N	Martial Art	ts					
CO4:	Describe T	hinai Co	oncept of 7	Tamils		×			
CO5:	Analyse Co	ontribut	tion of Tar	mils to Indian National Movement	and Ind	lian Cul	ture		
				Course Assessment methods					
		die de	Dire	ect	uman la se		Indire	ct	
CIE test I	(30)			Total CIE: 100 marks		C			-
CIE test II CIE test II	(30) I (40)			Semester End Examination: NIL	· .	Cou	rse ena	survey	
ച്ചകന്ത് 1	: GLDITLD	ເກ່າດເ		ுக்கியாற			3	Hour	
(செம்மெ தன்மை	இந்திய ாழி –தமி – சங்க	மொழி மொழி ழ் செ இல	ந்து இல் க்கு((க்கியத்தி க்கியத்தி	நம்பங்கள் - திராவிட செ கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - தி	மொழி கியத்த நக்குர	கள் தின் க நளில்	- த சமயச் மேல	மிழ் சார் எண்	ஒரு ஒரு பற்ற மைக்
சேம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக் வளர்ச்சி	இந்திய ாழி –தமி - சங்க க்கள் - 5ளின் தா க்கியங்கள் பியில் பார	ொழ் மொழி மாழி இலை தமி க்கம் ர் - த ரதியார்	நம் துர க்கியத்த நிழ்க் க - பக்தி தமிழில் ட மற்றுய	நம்பங்கள் - திராவிட இ கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின்	மொழி கியத்த நக்குர நக்குர ந தத்தில் எா மற் ளாச்ச எப்க்	கள் தின் க நளில் நட சப றும் ந சி – த களிப்ப	- த ரமயச் மேல ஹன நாயன் நமிழ் 	மிழ் சார் எண் பெல மார்க இலச்	ூரு பந்ந மைக் ாத்த ள் - ககிய
சேம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்சி அலகு 2	இந்திய ாழி –தமி க்கள் – களின் தா ககியங்கள் பில் பார : மரபு – சிற்	மொழி மொழி இலை தமி க்கம் ப் - த பான பக் க	ந்தன் கைகுமுத்த கைகியத்த நிழக் க ட பக்தி தமிழில் நமிழில் நடிதுவி கலை	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் பங்கள் முதல் ஒவியங்கள்	மொழி கியத்த நக்குர தத்தில் எார்ச்சி எார்ச்சி எபங் எ வன	கள் தின் க றளில் றைப் ந றும் ந சி – த களிப்ப றை –	- த சமயச் மேல ஹன நாயன் 5மிழ் 	மிழ் சார் எண் பெ மார்க இலச் Hour	ூரு ரைந மைக் எத்த எர் - ககிய ககிய
சேம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக் வளர்ச்சி அலகு 2 மற்றும் செய்யும் குமரிமு வீணை, கோவில்	இந்திய ாழி - தமி - சங்க க்கள் - களின் தா ககியங்கள் பில் பார : மரபு – சிற் பில் பார : மரபு – சிற் தடுகல் பு தடுகல் பு தடுகல் பு தையில் யாழ், களின் ப	பொழி மொழி இலை தமி க்கம் ர் - த ரதியார் - பான பக் க பக் க பான பக் க பான பக் க பான பக் க பான பக் க பான பக் க பான பான பான	நம் ஆல் க் கு(க் கியத்த க்கியத்த க்கியத்த நமிழில் ட பக்தி நமிழில் நமிழில் நமிழில் நமிழில் நடித்து கு கிற்பங்க பாரிக்குப் சுடுமண் பாரிக்குப் கடுமண் பாரிக்குப் கடுமண் பாரிக்குப்	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ந பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் ந பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் சிற்பங்கள் - நாட்டு ர சிலை - இசைக் கருவி - தமிழர்களின் சமூக	மொழி கியத்த நக்குர த்தில் ா மற் எார்ச்சி எ பங் எ பங் எ பங் எ பங் எ பங் ர வன சிலை ள், செ ப்புறத் கள் பெ	கள் தின் க றளில் ற சப றும் ந தி – த களிப்ப த – த கள் - பொம்ன த – டி ர – டி	- த ரமயச் மேல ஹன நாயன் நாயன் நமிழ் பழா நைமகள் நதய்வா நதங்க தார	மிழ் சார் வாண் பெ மார்க இலக் Hour த Hour பகுடிய ப நகள் ம், ப வாழ்	9ரு பந்ந மைக் ாத்த ள் - ககிய கிய வினர் தேர் - ஹில்
செம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்சி அலகு 2 மற்றும் செய்யும் குமரிமுக வீணை, கோவில் அலகு 3:	இந்திய ாழி – தமி - சங்க க்கள் – 5ளின் தா க்கியங்கள் பில் பார : மரபு – சிற் நடுகல் பு அவர்கள் தடுகல் பு தடிகல் பு தடிகல் பு தையில் யாழ், தளின் ப	பை நி நி நி நி நி நி நி நி நி நி நி நி நி	நம் ஆல் க் கு (க் கியத்தி க்கியத்தி நிழ்க் க - பக்தி நமிழில் நமிழில் நடிழில் நடிழில் கிற்பங்க பாரிக்குப் சுடுமண் பாரிக்குப் சுடுமண் பாரிக்குப் கடுமண் பாரிக்குப் கை	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ நவீன இலக்கியத்தின் வ நாக்கள் பூதல் இவியங்கள் கள் வரை – ஐம்பொன் ச ரிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பிழர்களின் சமூக பைற்றும் வீர விளையாட்டு	மொழி தியத்த நக்குர நக்குர நக்குர பந் வாச்ச பற் ர வன ர வன ர வன ர வன ர வன ர வன ர வன ர வன	கள் தின் க றளில் ற சப றும் ந தி – த களிப்ப ற – கள் - பொம்ன 5 ெ - மிரு ாருளா	- த ரமயச் மேல ஹன நாயன் நமிழ் நமிழ் பழா நைய்வ நதங்க தார	மிழ் சார் வண் பொன் மார்க இலச் Hour ந்கள் ம், ட வாழ் Hour	9ரு பற்ற மைக் ாத்த ள் - கிய வினர் தேர் வின் த
செம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்ச அலகு 2 மற்றும் செய்யும் குமரிமுக வீணை, கோவில் அலகு 3:	இந்திய ாழி – தமி - சங்க க்கள் - களின் தா க்கியங்கள் பில் பார : மரபு – சிற் பில் பார : மரபு – சிற் நடுகல் (யு அவர்கள் கலை னையில் யாழ், களின் ப தெருக்கூத வைக் கூத	பொழி மொழி மொழி மாழ் செ இல தமி க்கம் ர் - த தமி நதல் ர் - தி நாத நாத நாத நாத நாத நாத நாத நாத நாத நாத	நம ஆல் க் கு(க் கியத்தி க்கியத்தி ந்திழில் ட பக்தி நமிழில் ட மற்றும் ந ஓவி ந ஓவி ந ஓவி கருபங்க பாரிக்கும் கடுமண் பாரிக்கும் கருபங்க கருப்பு கைகள் கரகாட்டம் சிலம்பாட்	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் மற்றும் வீர விளையாட்டு ந் வில்லுப்பாட்டு, கணியான் டம், வளரி, புலியாட்டம், தா	மொழி தியத்த நக்கு நக்கு நக்கு நக்கு பற் வன ர வன ர வன ர வன ர வன ர வன ர வன ர வன ர	கள் தின் க றளில் றளில் றும் ந றும் ந களிப்ப ற – கள் - தி விர ந டை ந விர வின் வ	- த FDUபச் மேல ஹன நாயன் நமிழ் 	மிழ் சார் எண் பென் மார்க இலக் 3 Hour ந்கள் ம், ட வரழ் 3 Hour ந்கள் ம், ட வரழ் 3 Hour	⁵ ஒரு பற்ற மைக் ாத்த எர் - ககிய ககிய தர் வினர் தர் வினர் நவில் s
செம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்சி அலகு 2 மற்றும் செய்யும் குமரிமு வீணை, கோவில் அலகு 3: தோலபா அலகு 4:	இந்திய ாழி – தமி - சங்க க்கள் – களின் தா க்கியங்கள் பில் பார : மரபு – சிற் கையில் பா தருகல் (பு அவர்கள் கலை னையில் யாழ், களின் ப தருக்கத வைக் கூ	பொழி மொழி மொழி மர் செ இலை தமி க்கம் ர் - தமி நதல் ர் - தி ருக் க திருவ நாதவ நாதவ நாதவ நாதவ நாதவ நாதவ நாதவ நாத	நிக் கு(வ்விலக் க்கியத்தி நிழக் க - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி நடிழில் - பக்தி நடிரில் - பக்தி நடிரில் - பக்தி - பக்கி - பக்கி	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ மர்திதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ மர்திதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ மர்திதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ நிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - நாட்டு சிற்பங்கள் - தாட்டு சிற்பை வீர விளையாட்டு நிலை - திலை - திலை பினையாட்டு, கணியான் டல், வளரி, புலியாட்டம், தய கைகாட்பாடுகள்	மொழி தியத்த நக்கு நக்கு நக்கு நக்கில் பற் வாச்சி பை ர வன சிலை ள், தெ சிலை ள், தெ சிலை ள், தெ சிலை ள், தெ சிலை ை ர வன சிலை ை ர புந் சிலை நக்கு சிலை நிலை நக்கு சிலை நக்கு சிலை நக்கு சிலை நிலை சிலை சிலை நிலை நிலை நிலை நிலை நிலை நிலை நிலை சிலை சிலை சிலை நிலை சிலை சிலை சிலை சிலை சிலை சிலை சிலை ச	கள் தின் க றளில் ற சப றும் ந த – த களிப்ப ர – கள் - தி – த களிப்ப ர – கள் - றி – த – றி – த – த – ந – த	- த FDUUச் மேல நாயன் நாயன் நாயன் நாயன் நாயன் நாயன் நாயன் நாயன் நுய்வ நதங்க தார இலாட்ட விளைப்	மார்க வாண் பொன் மார்க இலச் Hour ந்கள் மாழ் Hour பரட்டு Hour	9ரு பற்ற மைக் ாத்த ள் - க்கிய கிய தர் வினர் தர் வின் கள். கள். கள்.
சேம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்சி அலகு 2 மற்றும் செய்யும் குமரிமு வீணை, கோவில் அலகு 3: தோலபா அலகு 4:	இந்திய ாழி – தமி - சங்க க்கள் - களின் தா ககியங்கள் பில் பார : மரபு – சிற் கையில் பார : மரபு – சிற் கையில் பார தருகல் (பு அவர்கள் கலை கையில் யாழ், களின் ப நாட்டுப்பு தெருக்கூத வைக் கூத தமிழர்க	பொழி மொழி மாழி இலை தமி க்கம் ர் - த நதல் ர் - தி பான பக் க நாதல் ர் தய நாதல்	நிக் கு(வ்விலக் க்கியத்தி நிழக் க - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி நமிழில் - பக்தி - பக்கி - பக்கி	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ <u>ந</u> வீன இலக்கியத்தின் கள் வரை – ஜம்பொன் கர நிற்பங்கள் - நாட்டு ர பற்றும் வீர விளையாட்டு ந் வில்லுப்பாட்டு, கணியான் டீட், வளரி, புலியாட்டம், தா கோட்பாடுகள் களும், விலங்குகளும் -	மொழி தியத்த நக்குர நக்குர நக்குர நக்குர பந் வி பிற் கள் பெ நகள் பெ நகள் கைத்த மிழர்க தை	கள் தின் க றளில் ற சப றும் ந த ச களிப்ப ர – த களிப்ப ர – கள் - த நி ர – ந ட ந ட ந ட ந ட ந ட வின் எ வின் எ	- த FDUJச் மேல ஹன நாயன் நாயன் நாயன் நற்று பழா நைகள் தய்வா நதங்க தார இலாட்ட விளைப்	மான் வை மான் மார்க இலச் Hour ந்கள் நட்டி பர், ப வாழ் Hour நிகள் நட்டு பாட்டு Hour	ஒரு பற்ற மைக் ாத்த எர் - க்கிய கிய கிய தர் வினர் வினர் வினர் கைிய கைர். க கள். க கள். க தர்
சேம்மெ தன்மை கருத்துக சமயங்க சிற்றிலக வளர்ச்சி அலகு 2 மற்றும் செய்யும் குமரிமு வீணை, கோவில் அலகு 3: தோலபா அலகு 4: சங்க இ	இந்திய ாழி – தமி - சங்க க்கள் - களின் தா க்கியங்கள் பில் பார : மரபு – சிற் நடுகல் (பு அவர்கள் கலை தையில் யாழ், களின் ப நாட்டுப்பு தெருக்கூத தைமிழர்க்கு தமிழகத்தி	பொழி மொழி மொழி மு வெ தமி க்கம் ர் - த தமி நதல் ர் - த திருவ நாதவ நாதவ நாதவ நாதவ நாதவ நாதவ நாதவ நாத	நைகாட்டப் கில்ம்பாட் கை கை கை குற்று குற்று குற்று குற்று குற்று குற்று குற்று குற்று கை குற்று கை குற்று கை கை கை கை கை கை கை கை கை கை கை கை கை	நம்பங்கள் - திராவிட (கியங்கள் - சங்க இலக்க கியங்கள் - சங்க இலக்க தில் பகிர்தல் அறம் - திர காப்பியங்கள், தமிழக காப்பியங்கள், தமிழக இலக்கியம், ஆழ்வார்கள் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் நவீன இலக்கியத்தின் வ ம் பாரதிதாசன் ஆகியோரின் பாரதிதாசன் ஆகியோரின் மற்றும் வர இதைக் கருவி - தமிழர்களின் சமூக பற்றும் வீர விளையாட்டு ம், வில்லுப்பாட்டு, கணியான் டம், வளரி, புலியாட்டம், தா களும், விலங்குகளும் - மற்றும் புறக் கோட்பாடுகள்	மொழி கியத்த நக்குர நக்குர நக்குர நக்குர பற் வி பி பி பி நிலை கி பி நிலை கி பி நிலை கி கி கி கி கி கி கி கி கி கி கி கி கி	கள் தின் க றளில் ற சப றும் ந தெளிப்ப தை தி தி த தி தி ற தி, ஒயி ளின் க நி, ஒயி ளின் க தி, ஒயி வின் க வின் க தி, ஒயி	- த FDULச் மேல ஹன நாயன் நரிழ் 	மிழ் சார் எண் பெ மார்க இலக் Hour க்கள் ம், ப வரழ் Hour பாட்டு Hour	⁵ ஒரு பற்ற மைக் ாத்த எர் க்கிய தர் கேள். 5 தர் நறும் நறும்

சங்கக	கால நகரங்களும் துறை முகங்களும் - சங்ககாலத்தில் ஏற்றுமதி மற்றும்
இறக்	தமதி — கடல்கடந்த நாடுகளில் சோழர்களின் வெற்றி.
அலகு தமிழர்	5: இந்திய தேசிய இயக்கம் மற்றும் இந்திய பண்பாட்டிற்குத் களின் பங்களிப்பு
	இந்திய விடுதலைப்போரில் தமிழர்களின் பங்கு - இந்தியாவின்
பிறப்ப	பகுதிகளில் தமிழ்ப் பண்பாட்டின் தாக்கம் - சுயமரியாதை இயக்கம் - இந்திய
மருத்	துவத்தில், சித்த மருத்துவத்தின் பங்கு – கல்வெட்டுகள்
கை	யழுத்துப்படிகள் - தமிழ்ப் புத்தகங்களின் அச்சு வரலாறு.
Th	eory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs
REFER	RENCES
1	தமிழக வரலாறு — மக்களும் பண்பாடு — கே.கே. பிள்ளை (வெளியீடு: கமிம்நாடு பாடநால் மும்மும் கல்லியியல் பணிகள் கமகம்)
2	தனினிக் துரிழ் - முனைவர் இல்குந்தாழ் (விகடன் பிரசாம்).
2	
3	கழடி – வைகை நதிக்கரையில் சங்ககால நகர் நாகாகம் (தொல்லியல் துறை வெளியீடு)
4	பொருநை —ஆற்றங்னரை நாகரிகம். (தொல்லியல் துறை வெளியீடு)
5	Social Life of Tamils (Dr.K.K.Pillay) A joint publication of TNTB & ESC and RMRL - (in print)
6	Social Life of the Tamils - The Classical Period (Dr.S.Singaravelu) (Published by:
	International Institute of Tamil Studies
7	Historical Heritage of the Tamils (Dr.S.V.Subatamanian, Dr.K.D. Thirunavukkarasu)
0	The Contributions of the Tamils to Indian Culture (Dr. M. Valarmathi) (Published by:
0	International Institute of Tamil Studies.)
9	Keeladi - 'Sangam City C ivilization on the banks of river Vaigai' (Jointly Published by:
	Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation,
10	Studies in the History of India with Special Reference to Tamil Nadu (Dr.K.K.Pillav)
10	(Published by: The Author)
11	Porunai Civilization (Jointly Published by: Department of Archaeology & Tamil Nadu Text
	Book and Educational Services Corporation, Tamil Nadu)
1 40	

HOD

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 650 005.

Programme: B. E / B. Tech

0201	TAM101	தமிழர் ၊	олц / Heritage of Tamils			P	J	
Course C	Outcomes			1	0	0	0	1
At the on	d of the cour	no the student -	11 h				•	
At the en		se, the student w	III be able to					
CO1:	Describe T	amil Language an	d Literature					
CO2:	Analyse H	eritage - Rock Art	Paintings To Modern Art -	Sculpture				
CO3:	Explain Fol	k and Martial Art	S		<u></u>			
CO4:	Describe Tl	ninai Concept of T	amils					
CO5:	Analyse Co	ontribution of Tan	nils to Indian National Move	ment and In	lian Cul	ture		
		(Course Assessment methods	3				
	1	Dire	ct	The second second		Indired	t	
CIE test I	(30)		Total CIE: 100 marks					
CIE test I	[(30)		Semester End Examination	n: NIL	Cou	rse end	survey	
CIE test I	LI (40)					1		
	Towili in I	LITERATURE	T 1 01	• • •		3	Hours	
Land - Ba literature Jnit 02: H	kthi Literatur in Tamil - Co IERITAGE -	e Azhwars and N ntribution of Bha	ayanmars - Forms of minor F rathiyar and Bharathidhasan.	Poetry - Dev	elopmen	t of Mo	dern	
Land - Ba literature Jnit 02: H SCULPTU	kthi Literatur in Tamil - Co IERITAGE - JRE	e Azhwars and N ntribution of Bha ROCK ART PA	ayanmars - Forms of minor F rathiyar and Bharathidhasan.	Poetry - Dev	elopmen	t of Mo	dern Hours	
Land - Ba literature Jnit 02: H SCULPTU Hero ston	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s	e Azhwars and N ntribution of Bha ROCK ART PA	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand	ART –	elopmen	t of Mo	dern Hours	
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand b, Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh a	ART – licrafts - Art var Statue at nd Nadhasw	of temp Kanyakaram - R	all rain t of Mo 3 ble car umari, cole of	dern Hours	
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and	e Azhwars and N ntribution of Bha ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils	oetry - Dev ART – licrafts - Art var Statue at nd Nadhasw	of temp Kanyak aram - F	all rain t of Mo 3 de car umari, tole of	dern Hours	
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03:	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK AND	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN icons - Tribes and their hand village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils	oetry - Dev ART – dicrafts - Art var Statue at nd Nadhasw	of temp Kanyak aram - F	alle car umari, cole of 3	Hours	3
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst in Social and FOLK ANI thu, Karagatt ce - Sports an	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam,	ART – dicrafts - Art var Statue at nd Nadhasw	of temp Kanyak aram - F	alle car umari, cole of 3 ilambatt	Hours Hours Hours tam, V	alari
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04:	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAL CO	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, K ad Games of Tami	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, ls	ART – dicrafts - Art var Statue at nd Nadhasw	of temp Kanyak aram - F	alle car umari, cole of 3 ilambatt	Hours Hours Hours tam, V	alari
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: Flora and	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tar	e Azhwars and N ntribution of Bha ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami NCEPT OF TAN nils & Aham and	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand s, Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh ar Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup	of temp Kanyak aram - R opetry, S	all rain t of Mo 3 ble car umari, cole of 3 ilambatt 3 n Litera	Hours Hours Hours tam, V Hours ture - 4	alari
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept o	kthi Literatur in Tamil - Co IERITAGE - J RE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamis - Ec	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka acy during Sangam Age - Ar	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities	of temp Kanyaki aram - F opetry, S	alle car umari, cole of 3 ilambatt 3 n Litera ts of Sa	Hours Hours tam, V Hours ture - A ngam A	alari Aram Age -
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept o Export an	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, K d Games of Tami NCEPT OF TAN nils & Aham and lucation and Liter ng Sangam Age -	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh ar Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka acy during Sangam Age - Ar Overseas Conquest of Chola	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities IS.	of temp Kanyak aram - F opetry, S I Sangar and Por	alle car umari, cole of 3 ilambatt n Litera ts of Sa	Hours Hours Hours tam, V Hours ture - A ngam A	alari Aran Age
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept of Export an Jnit 05: C	kthi Literatur in Tamil - Co HERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an FHINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka acy during Sangam Age - An Overseas Conquest of Chola LS TO INDIAN NATIONA	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM	of temp Kanyaki aram - R opetry, S I Sangar and Por	all raining to f Moo 3 alle car umari, cole of 3 ilambatt 3 n Litera ts of Sa 3	Hours Hours tam, V Hours ture - A ngam A Hours	alari Aran Age
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: Flora and Concept o Export an Jnit 05: C ND IND Contribut	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, K ad Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMIN RE to Indian Freedom	 ayanmars - Forms of minor Frathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hands, Village deities, Thiruvalluv, ngam, Parai, Veenai, Yazh ar Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholks acy during Sangam Age - Ar Overseas Conquest of Chola LS TO INDIAN NATIONA m Struggle - The Cultural Infi 	Poetry - Dev ART – licrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM	of temp Kanyaka aram - F opetry, S I Sangar and Por IENT amils ov	alle car umari, cole of 3 ilambatt 3 n Litera ts of Sa 3 er the of	Hours Hours tam, V Hours ture - A ngam A Hours ther pai	alari Aran Age -
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept of Export an Jnit 05: C ND IND Contribut India – Se	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedor ovement - Role o	Taim Epies and impact of E ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand s, Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh ar Tamils TS Kaniyan Koothu, Oyillattam, Is MILS Puram Concept from Tholka acy during Sangam Age - Ar Overseas Conquest of Chola LS TO INDIAN NATIONA m Struggle - The Cultural Inf f Siddha Medicine in Indigen	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM fluence of Ta nous System	of temp Kanyaka aram - F opetry, S I Sangar and Por ENT amils ov s of Med	all rain t of Mo 3 ble car umari, cole of 3 ilambatt 3 n Litera ts of Sa er the of licine –	Hours Hours tam, V Hours ture - A ngam A Hours ther pai Inscrip	alari Aran Age
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: Flora and Concept o Export an Jnit 05: C ND IND Contribut India – Se & Manuso	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK AND thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils elf-Respect M cripts – Print	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k ad Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedom ovement - Role o History of Tamil	A struggle - The Cultural Info South Series and Series and Series Series of Series and the A struggle - The Cultural Info Series Series Series and Series	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM fluence of Ta nous System	of temp Kanyaki aram - F opetry, S I Sangar and Por ENT amils ov s of Med	alle car umari, cole of 3 ilambatt 3 n Litera ts of Sa er the of licine –	Hours Hours tam, V Hours ture - A ngam A Hours ther pai Inscrip	alari Aram Age rts o:
Land - Ba literature Jnit 02: H GCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: Therukoo Concept of Export an Jnit 05: C ND IND Contribut India – Se & Manuso Theorem	kthi Literatur in Tamil - Co HERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils elf-Respect M cripts – Print ry: 15 Hrs	e Azhwars and N ntribution of Bhar ROCK ART PA culpture - Bronze rracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, K ad Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedon ovement - Role o History of Tamil	Taim Epies and Impact of Easting and Epies and Impact of Easting and Ea	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities L MOVEM fluence of Ta nous System ject:	i of temp Kanyak aram - F opetry, S I Sangar and Por ENT amils ov s of Med Total	all car umari, cole of 3 ilambatt 3 n Litera ts of Sa er the of licine –	Hours Hours tam, V Hours ture - A ngam A Hours ther par Inscrip	alari Aran Age rts o tions
Land - Ba literature Jnit 02: H SCULPTU Hero stom making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept o Export an Jnit 05: C ND IND Contribut India – Se & Manuso REFEREI	kthi Literatur in Tamil - Co HERITAGE - J RE e to modern s - Massive Ter f musical inst in Social and FOLK ANI thu, Karagatt ce - Sports an FHINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils elf-Respect M cripts – Print ry: 15 Hrs NCES	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k ad Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedor ovement - Role o History of Tamil 1 Tutorial:	Taim Epies and Impact of E ayanmars - Forms of minor F rathiyar and Bharathidhasan INTINGS TO MODERN A icons - Tribes and their hand i, Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka acy during Sangam Age - Ar Overseas Conquest of Chola LS TO INDIAN NATIONA m Struggle - The Cultural Inf f Siddha Medicine in Indigen Books Practical:	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM fluence of Ta nous System ject:	i of temp Kanyaki aram - F opetry, S I Sangar and Por IENT amils ov s of Med Total	all rain all car umari, cole of all ambatt an Litera ts of Sa ar the of licine – Hours:	Hours Hours tam, V Hours ture - A ngam A Hours ther pai Inscrip	alari Aran Age rts o tions
Land - Ba literature Jnit 02: H SCULPTU Hero ston making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: Flora and Concept o Export an Jnit 05: C ND IND Contribut India – Se & Manuso REFEREI 1	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK AND thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils elf-Respect M cripts – Print ry: 15 Hrs NCES 5161105 6110	e Azhwars and N ntribution of Bhar ROCK ART PA acculpture - Bronze rracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, K ad Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedor ovement - Role of History of Tamil I Tutorial:	Taim Epies and Impact of Easynmars - Forms of minor Frathiyar and Bharathidhasan INTINGS TO MODERN A icons - Tribes and their hands, Village deities, Thiruvalluv, ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, ls IILS Puram Concept from Tholka acy during Sangam Age - Ar Overseas Conquest of Chola LS TO INDIAN NATIONA m Struggle - The Cultural Inf f Siddha Medicine in Indigen Books Practical: Pro	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities I. MOVEM fluence of Ta ious System ject:	i of temp Kanyaka aram - F opetry, S Sopetry, S Sopetr	alle car umari, cole of 3 ilambatt 3 n Litera ts of Sa 3 er the of licine – 1 Hours:	Hours Hours tam, V Hours ture - A ngam A Hours ther pai Inscrip	alari alari Aram Age - rts o: tions
Land - Ba literature Jnit 02: H SCULPTU Hero stom making - Making o Temples i Unit 03: Therukoo Tiger dan Jnit 04: 7 Flora and Concept o Export an Jnit 05: C ND IND Contribut India – Se & Manuso REFEREI 1	kthi Literatur in Tamil - Co IERITAGE - JRE e to modern s - Massive Ter f musical inst n Social and FOLK ANI thu, Karagatt ce - Sports an THINAI CO Fauna of Tamils of Tamils - Ec d Import duri CONTRIBUT IAN CULTU ion of Tamils elf-Respect M cripts – Print ry: 15 Hrs NCES 500 gan G	e Azhwars and N ntribution of Bhar ROCK ART PA sculpture - Bronze tracotta sculptures ruments - Mridha Economic Life of MARTIAL AR am, Villu Pattu, k d Games of Tami NCEPT OF TAM nils & Aham and lucation and Liter ng Sangam Age - TION OF TAMII RE to Indian Freedor ovement - Role o History of Tamil I Tutorial:	ayanmars - Forms of minor F rathiyar and Bharathidhasan. INTINGS TO MODERN A icons - Tribes and their hand , Village deities, Thiruvalluv ngam, Parai, Veenai, Yazh an Tamils TS Kaniyan Koothu, Oyillattam, Is MILS Puram Concept from Tholka acy during Sangam Age - Ar Overseas Conquest of Chola S TO INDIAN NATIONA m Struggle - The Cultural Inf f Siddha Medicine in Indigen Books Practical: Pro	ART – dicrafts - Art var Statue at nd Nadhasw Leather pup appiyam and ncient Cities L MOVEM fluence of Ta ious System ject:	i of temp Kanyaki aram - F opetry, S Sopetry, S I Sangar and Por I Sangar and Por I Sangar and Por I Sangar and Por I Sangar and Por I Sangar and Por	alle car umari, cole of allambatt an Litera ts of Sa ar the of licine – Hours: fluige:	Hours Hours tam, V Hours ture - A ngam A Hours ther pa Inscrip	alari Aram Age rts of tions

3	கீழடி – மவமக நதிக்கமரயில் ெங்ககொல நகர நொகரிகம்
	(ததொல்லியல் துமறதவளியீடு)
4	பொருமந – ஆற்றங்கமர நொகரிகம். (ததொல்லியல் துமற தவளியீடு)
5	Social Life of Tamils (Dr.K.K.Pillay) A joint publication of TNTB & ESC and RMRL – (in print)
6	Social Life of the Tamils - The Classical Period (Dr.S.Singaravelu) (Published by:
7	Historical Heritage of the Tamils (Dr.S.V.Subatamanian, Dr.K.D. Thirunavukkarasu) (Published by: International Institute of Tamil Studies).
8	The Contributions of the Tamils to Indian Culture (Dr.M.Valarmathi) (Published by: International Institute of Tamil Studies.)
9	Keeladi - 'Sangam City C ivilization on the banks of river Vaigai' (Jointly Published by: Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation, Tamil Nadu)
10	Studies in the History of India with Special Reference to Tamil Nadu (Dr.K.K.Pillay) (Published by: The Author)
11	Porunai Civilization (Jointly Published by: Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation, Tamil Nadu)
12	Journey of Civilization Indus to Vaigai (R.Balakrishnan) (Published by: RMRL) – Reference Book.

M-Lon-

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 (c)

Programme: B. E / B. Tech

B.E / B. Tech Regulations 2023

,													r
U2	3GE101			BA	SIC AP	TITUDI	E-1		L	T	P	J	C
				1000 10 40	×3¥ 131	626 ¥ <i>27</i> 2	The state		2	0	0	0	0
Course (Dutcome	8				····					I		
At the en	nd of the	course	, the stu	udent w	ill be ab	le to							
CO1:	Solve t	he prol	olems in	i Divisi	bility , D	Division a	algorithm	,Succes	sive Di	vision an	d HCI	F&L	CM.
	Identify	y Synor	nyms ar	nd Antor	iyms.		· · · ·						
CO2:	Elucida	ate the	problem	is in BO	DMAS r	ule, App	proximati	on, Surd	s and Ir	ndices, A	lgebra	10	
	Simpli	fication	and Sq	uare roc	ot and Cu	ibe root.	the virie						
600	Crook	appro	priate v	erbai Al	Datio	and Drom	the give	n passage	es.	mtionalit	The		
CO3:	Crack	che pro	the give	ivoiving	Katio a	and Prop	ortion, a	nd discus	ss Prope	ortionalit	y Theo	orems.	
1.1	correct	by	life give	II passag		cauling C	omprene		livity a	ilu aliswe	i me ç	lacsur	JII5
CO4.	Deduce	the nr	ohlems	involvir	o Linear	equatio	n and Or	adratic e	equation	1			
004:	Demon	strate	good v	ocabula	ry skill	by doin	g the or	ne word	substit	ution an	d sent	ence	filler
	exercis	e with	high de	pree of a	ecuracy	oy dom	5 110 01		5405111	ation an		CHICC	miter
C05.	Interpr	et the l	ogical r	easoning	problen	ns from	Number	series .C	oding a	and Deco	ding a	nd Ex	chibit
005.	good e	xpertise	e in dete	ecting er	rors in th	ne given	sentence	s.	0				
Pre-requ	isite:			0		0							
•	Basic F	English	languag	e and G	rammar	knowled	loe						
	Vecul	adaa in	Desis	Joth and	tion	KIIO WICC	-50						
	Knowle	eage in	Basic r	viatnema	aucs								
					CO/PO	, PSO N	I apping						
	(3/2/1 ii	ndicates	s the stre	ngth of c	correlatio	on) 3-Stro	ong, 2-M	edium,	1-Weak			
	1997 - M. J.	Pr	ogramm	ne Outco	mes (PO	s) and P	rogramm	ne Specif	ic Outc	omes (PS	SOs)		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO 11	PC)12
CO1	3	3-	3.	2	1	1	1	3	3-	3-	2	3	5
CO2	3	3	3	2	1	1	1	3	3	3	2	3	j
CO3	3	3	3	2	1	1	1	3	3	3	2	3	J
CO4	3	3	3	2	1	1	1	3	3	3	2	3	\$
CO5	3	3	3	2	1	1	1	3	3	3	2	3	,
						n (Alexandra) - Anna (Alexandra) - Alexandra (Alexandra)		1					
				<u> </u>	ourse As	ssessme	nt metho	ods					
				Direc	et					Iı	ıdirec	t	
CIE test	I (30) - TI	heory			Total (TE: 100	marke						
CHE to the	H-(20) 7	12			Total	. 100	marks		-				
CIE test	II (30) - 1	neory			Semes	ster End	Examina	tion – N	IL	Course	e end s	urvey	,
CIE test	III (40) –	Theory	y										

Unit	: 01					6 Hours
Ñur	nber Properties: Cl	assification of nur	mbers - Divisibilit	y - Division algor	rithm -Succes	ssive Division -
HC	F and LCM – Proble	ems				
Ver	bal Aptitude: Syno	nyms and b. Anto	nyms			т. - С
Unit	: 02	-				6 Hours
Sim	plification: BODM	IAS Rule - Appro	ximation - Surds	and Indices - Alg	ebraic Simpli	ification - Square
root	and Cube root – P	roblems				
Ver	bal Aptitude: Verba	al analogy, Editin	g passages			
Unit	: 03					6 Hours
Rat	o and Proportion :	Ratio - Properties	of Ratios - Comp	ound Ratio - Coi	n based probl	ems - Proportion -
Proj	portionality Test - I	Proportionality Th	eorems - Inverse	Proportion - Varia	ation - Proble	ems
Ver	bal Aptitude: Read	ing Comprehensio	on			
Unit	: 04		'n			6 Hours
Equ	ations:	-	-			
a.	Linear equation: Si	imultaneous Linea	ar Equations - Cor	sistent System - I	Inconsistent S	System - Problems
b.	Quadratic Equation	n: Different Ways	to Express the Qu	adratic Equation	- Discriminat	nt of the Quadratic
	Equations - Roots -	- Nature of the Ro	oots - Relation be	tween roots and c	coefficient of	equation -
	Formation of a Qua	adratic Equation –	- Problems			
Ver	bal Aptitude: One	word substitution	, Sentence filler v	vords		
Unit	: 05					6 Hours
Log	ical Reasoning : N	umber series – Co	ding and Decodir	ig – Problem		
Ver	bal Aptitude: Error	detection	C C	·		
The	eory: 30 Hrs	Tutorial: 0	Practical: 0	Project: 0	Total Ho	urs: 30 Hrs
TE	XT BOOKS					
1.	S.Chand and Dr.R Company Limited	.S.Aggarwal, "Qu 2019.	antitative Aptitud	e for competitive	examination	s", S Chand and
2.	Nishit K.Sinha, "L	logical Reasoning	and Data Interpret	etation", Pearson	2021.	

15/09/2023 Dr.S.Anita

Dr.S.Anita Head/Training Dr. S. ANITA Professor and Head Department of Training, SONA COLLEGE OF TECHNOLOC 7, SALEM-636 005.

· ۲ ز

Programme:

B.E / B. Tech Regulations 2023

U23	OL1101	French			L	Т	P	J	C
					1	0	0	0	1
Course C	Dutcomes					*			
At the er	nd of the cour	se, the student will	be able to						
CO1:	Read Frence English sou	h phrases, Spell Frei nds	ich phonitis, pract	ice French acc	cents, d	ifferenti	ate Frei	nch and	1
CO2:	Introduce of and respond	neself, talk about so politely in a conver	meone, ask others rsation	personal info	rmation	, identif	y an ob	ject, as	sk.
CO3:	Read and w	rite a small annonce	ment, describe abo	out neighbour	s, write	a small	portrai	t	
CO4:	Express one justify a cho	e's wishes, talk abou pice, express one's p	ut one's hobbies, a references, write a	ask time, desc i list of needs	cribe or	ne's stat	us of lit	fe in a	blog,
CO5:	Suggest to c	to something, appre	ciate something, ta	ilk about a mo	ovie, wr	ite a pos	stal card	1	
		Co	urse Assessment i	netnoas					
		Direct					Indire	ct	
CIE test I CIE test I	I (30) I (30) II (40)		Total CIE: 100 mar Semester End Exar	ks mination: NIL		Cour	rse end	survey	7
Unit 01:			N - 5 1	-			3	Hour	
Hr 2: Alp Hr 4: Nat Hr 6: Det	habets, Basic tionalities and finite articles,	wishes, self-introdu countries, colors, da numbers 0-20, write	ction, basic verbs: ays & months about one's ident	avoir and être	e				
Unit 02:	-						3	Hours	5
Hr 12: Tl Unit 03: Hr 14: Ta	alk about acco	mmodation, conjuga	hatitic pronouns, s	elf-introductionir, possessive	on online adject	ives	3	Hour	5
Hr 16: A Hr 18: Pl	djective's gen nysical descrip	der, noun's gender, potion, speak about ac	things in a room, s commodation, wri	imple preposi iting a self-po	tions trait				Ę
Unit 04:							3	Hour	3
Hr 20: H Hr 22: In Hr 24: N	obbies, conjug terrogative ad ear future tens	gation: vouloir, pouv jectives, daily activi se, talk about prefere	oir and devoir, con ties, time and seas ences, write a mail	nnected article ons, pronomin	es nal vert)S			
Unit 05:					×.		3	Hour	5
Hr 26: O Hr 28: A Hr 30: Fr	uting activitie dverbs of freq rench arts, talk	s, conjugation: faire uency, family member about a film, and w	and sortir, demonspers, past tenses (p rrite a postal card	strative adject assé composé	ives and im	parfait)			
Theo	ory: 15 Hrs	Tutorial:	Practical:	Project:	-	Tota	l Hours	: 15 H	rs
TEXT BO	OOKS								
1. T	he course facu	lty will provide rele	vant audios, video	s, handouts ar	nd notes	5			
2. B	ooks : Saison	(Méthode de françai	s, cachier d'activit	tés)					
3. R	eference book	s : La conjugaison, l	Dondon, Echo						
				1	f.	Dr. Pro	M.R	HOD ENL	JGA lead,
4	.8.2023 Versi	ion I.O Program	nme: B.E /B.Tech	B.E/	B Tech	Regulatio	of Hum ons 2023	anities of Ter	& La

BE/B.Tech Regulations 2023 of Technology, SALEM - 63

TIOO	OI 1102	Germa	an	I	. T	P	J	C					
0230	JL1102		2	1	L 0	0	0	1					
Course C	Outcomes												
At the en	d of the cou	rse, the student wi	ll be able to										
CO1:	Use comm	on, everyday expre	ssions to greet others	and introduce th	emselves								
CO2:	Construct s	simple sentences /q	uestions.										
CO3:	Initiate and	sustain basic conv	ersation based on fai	nily, professions,									
CO4:	Hobbies an	d food.											
CO5:	Identify dif	Identify differences in using nouns based on gender.											
	1	C	ourse Assessment n	nethods									
		Direc	t			Indire	ct	a dia dia M					
CIE test I CIE test I CIE test I	(30) I (30) II (40)		Total CIE: 100 mar Semester End Exan	ks nination: NIL	Co	ourse end survey							
Jnit 01:						3	B Hour	s					
• G	reeting and ta	aking leave, introdu	icing oneself, introdu	icing others									
Unit 02:						3	B Hour	s					
• A	lphabets, spe	lling, numbers											
Unit 03:						3	B Hour	s					
• A	ge, Telephon	e/mobile numbers,	Month, Date, Time										
Unit 04:						3	3 Hour	s					
• L	anguages, Fa	mily, Asking/givin	g information about	family members									
Unit 05:						3	3 Hour	s					
• H	obbies, Profe	essions						and a second					
Theo	ory: 15 Hrs	Tutorial:	Practical:	Project:	To	al Hour	s: 15 H	rs					
TEXT BO	OOKS					. 1							
1 N	etzwerk A1												

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 63

Programme: B.E / B. Tech

B.E / B. Tech Regulations 2023

U230L1103 Japanese L T P J C Course Outcomes At the end of the course, the student will be able to 1 0 0 0 1 CO1: Use words and phrases of greeting in Japanese, write the letters of the alphabet, identify names o objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese Indirect CD5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods Direct Total CIE: 100 marks Course end survey Course end survey CIE test II (30) Total CIE: 100 marks Course end survey CIE test II (40) 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-8: Asking for directions when shopping Hr 1-12: Chaing light conversation			T				1	1	T
Course Outcomes 1 0 0 1 Course Outcomes At the end of the course, the student will be able to COI: Use words and phrases of greeting in Japanese, write the letters of the alphabet, identify names o objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CON: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate counting in Japanese Indirect CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese. Indirect CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods C1E test II (30) Total CIE: 100 marks Course end survey C1E test II (40) Total CIE: 100 marks Semester End Examination: NIL Course end survey C1E test II (40) Total CIE: 100 marks Semester End Examination: NIL Semester End Examination: NIL Semester End Examination: NIL C1E test II (40) Total CIE: 100 marks Semester End Examination: NIL Semester End Examination: N	U23	OL1103	Japane	se			P	J	C
Course Outcomes At the end of the course, the student will be able to CO1: Use words and phrases of greeting in Japanese, write the letters of the alphabet, identify names o objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO4: Express liking for the Japanese CO4: Express liking for directions and naves repress a willingness to go to Japan and use 'Te-form' verbs C1: Express liking for directions when shopping Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 5-6: Self-introduction Finit 02: 3 Hours Hr 13-14: Expressions to use ve						1 0	0	0	1
At the end of the course, the student will be able to CO1: Use words and phrases of greeting in Japanese, write the letters of the alphabet, identify names o objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3:Use different thinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5:Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods C01:CIE test II (30) C1E test II (30) C1E test II (30) C1E test II (30) C1E test II (40) Anit 01: C1E test II (40) Anit 01: C1E comparison of from pictures or objects shown C1F -2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters C1F -34: Identifying words from pictures or objects shown C1F -36: Self-introduction C1F -36: Self-introduction C1F -36: Adsing for directions when shopping C1F -12: Making light conversation C1F -36: Adjectives C1F -37: Adjectives C1F -36: Adjectives C1F -37: Adjectives C1F -36: Adjectives C1F -36: Adjectives C1F -36: Adjectives C1F -37: Adjectives C	Course C	Outcomes	1				-		
CO1: Use words and phrases of greeting in Japanese, write the letters of the alphabet, identify names o objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C04: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese, methods CD5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C04: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese, methods CD6: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C04: Expressions for stated things, express a willingness to go to Japan and use 'Te-form' verbs C05: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C1E test II (30) Total CIE: 100 marks Course end survey C1E test II (40)	At the er	d of the cou	rse, the student wi	ll be able to					
objects and do a self-introduction using short and simple sentences CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C05: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C06: Express liking for the Japanese C07: Total CIE: 100 marks C1E test II (30) Total CIE: 100 marks C1E test III (40) Semester End Examination: NIL C01: Gurse Assessment methods HT 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr Hr 7-8: Asking for directions when shopping Hr Hr 9-10: Time words and Verb Conjugations Hr Hr 11-12: Making light conversation 3 Hours Hr 12: Adjectives 3 Hours Hr 13-14: Expressions to use verbs from morning to ni	CO1:	Use words	and phrases of gree	eting in Japanese, w	rite the letters of	the alphab	et, identi	fy nam	es o
CO2: Demonstrate the use of time-related words and verb conjunctions and make light conversation asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C05: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C06: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C07: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C08: Direct Indirect C17: Total C1E: 100 marks Course end survey C16: test II (30) Semester End Examination: NIL Course end survey C16: test II (40) Total C1E: 100 marks Sthours Sthours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 1-2: Greeting words and Verb Conjugations Sthours Hr 7-8: Algent oversation Init 02: Sthours Sthours Hr 13-14:		objects and	do a self-introduct	ion using short and	simple sentences				
asking for directions and answering questions CO3: Use different kinds of verbs through the day and those used for giving things, and demonstrate the use of adjectives CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C1E test II (30) Total CIE: 100 marks Course end survey C1E test III (40) Total CIE: 100 marks Course end survey If the form goods and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 1-2: Gelf-introduction 3 Hours Init 02: 3 Hours Hr 1-3: Hr 2-1: Making light conversation J Hours Init 03: 3 Hours Hr 1-12: Hr 13-14: Expressions to use verbs from morning to night Hr 13:-14: Expressions to use verbs from	CO2:	Demonstra	te the use of time-re	elated words and ve	rb conjunctions a	nd make li	ight conv	versatic	n
CO3: Ose uniferint Kinds of Verbs through the day and those used for giving unings, and demonstrate ounting in Japanese CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods Course and survey Course and survey Course and survey Total CIE: 100 marks Semester End Examination: NIL Course ford incretions of promotype products of objects shown HT 1-2: Asking for directions wh	CO1.	Lise differe	infections and answ	rening questions	has used for give	ing things	and day	nonstra	to
CO4: Express liking for the Japanese language, describe the locations of different things an demonstrate counting in Japanese CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs CO5: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs C06: Indirect C17: Indirect C18: Indirect C19: Total C1E: 100 marks C11: Semester End Examination: NIL C0: Course end survey C11: Semester End Examination: NIL C11: Course end survey C12: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 5-6: Self-introduction Init 02: 3 Hours Hr 1-12: Making light conversation Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions and counting Init 03: 3 Hours Hr 12-20: Ways to show liking for the Japanese l	CO3:	the use of a	diectives	ilough the day and t	nose used for giv	ing unigs.	, and den	1011511.0	le
CO: Indirect in Japanese CO: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods Direct Indirect Indirect CIE test II (30) Total CIE: 100 marks Semester End Examination: NIL Course end survey Int 01: 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 5-6: Self-introduction init 02: Hr 9-10: Time words and Verb Conjugations Hr 1-12: Making light conversation init 03: Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 12-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting init 05: 3 Hours Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 23-24: Japanese language available in the college library. 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.<	CO4·	Express li	king for the lan:	mese language de	scribe the local	tions of a	lifferent	thing	an
COS: Make comparisons of stated things, express a willingness to go to Japan and use 'Te-form' verbs Course Assessment methods Indirect Indirect Course Assessment methods Course end survey Course end survey Assessment methods Assessment methods Methods Indicate Assessment methods Total Hourses Asse	CO1.	demonstrat	e counting in Japar	iese				umg	
Course Assessment methods Direct Indirect Course Assessment methods Direct Indirect Course Assessment methods Course Assessment methods Course End Examination: NIL Course end survey The test III (40) Course end survey Thill test in Course of Self-introduction 3 Hours HT 7-8: Asking for directions when shopping HT 7-8: Asking for directions when shopping HT 7-8: Asking for directions when shopping HT 1-12: Making light conversation Init 02: 3 Hours HT 1-12: Making light conversation 3 Hours HT 19-20: Ways to show liking for the Japanese	CO5:	Make com	parisons of stated th	nings, express a will	ingness to go to .	apan and	use 'Te-f	form' v	erbs
Direct Indirect CIE test I (30) Total CIE: 100 marks Course end survey CIE test III (40) Semester End Examination: NIL Course end survey Init 01: 3 Hours 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters 3 Hours Hr 3-4: Identifying words from pictures or objects shown 3 Hours Hr 5-6: Self-introduction 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 1-12: Making light conversation 3 Hours Hr 13-14: Expressions to use verbs from morning to night 3 Hours Hr 15-16: Verbs used for giving things 3 Hours Hr 11-14: Adjectives 3 Hours Hr 19-20: Ways to show liking for the Japanese language 3 Hours Hr 23-24: Japanese numbers and counting 3 Hours Hr 22-30: Using 'Te-form' Verb 3 Hours Theory: 15 Hrs Tutorial: Practical: Theory: 15 Hrs Tutorial: Project: The course faculty will provide handouts / notes / course mat			C	ourse Assessment	nethods	î			
CIE test I (30) Total CIE: 100 marks Course end survey CIE test III (40) Semester End Examination: NIL. Course end survey Init 01: 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 3-4: Identifying words from pictures or objects shown 3 Hours Hr 5-6: Self-introduction 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 9-10: Time words and Verb Conjugations Hr 11-12: Making light conversation Init 03: H 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things H 13-14: Expressions to use verbs from morning to night Hr 19-20: Ways to show liking for the Japanese language H 12-22: Describing the location of things (or where things are) Hr 12-22: Describing the location of things (or where things are) H 23-24: Japanese numbers and counting Init 05: 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 23-20: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: - Practical: Project: Total Hours: 15 Hrs TEXT BOOKS	8		Direc	t			Indire	ct	
Cite test II (30) Semester End Examination: NIL Course end survey Cite test III (40) 3 Hours Arrison Course end survey 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters 3 Hours Hr 3-4: Identifying words from pictures or objects shown 3 Hours Hr 5-6: Self-introduction 3 Hours Init 02: 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 1-12: Making light conversation 3 Hours Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives 3 Hours Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 22-22: Describing the location of things (or where things are) 3 Hours Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide ha	CIE test I	(30)		Total CIE: 100 mai	ks				
CIE test III (40) 3 Hours Arright of the form of the standard	CIE test I	I (30)		Semester End Eva	mination: NIL	Co	urse end	survey	/
init 01: 3 Hours Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 3-4: Identifying words for pictures or objects shown 3 Hours Hr 3-4: Identifying words for directions when shopping 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 11-12: Making light conversation 3 Hours Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night 3 Hours Hr 13-14: Expressions to use verbs from morning to night 3 Hours Hr 17-18: Adjectives 3 Hours Init 04: 3 Hours Hr 21-22: Describing the location of things (or where things are) 3 Hours Hr 22-26: Making comparisons 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 22-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs I The course faculty will provide handouts / notes	CIE test I	II (40)		bennester Ena Exa				,	
Hr 1-2: Greeting words and phrases; the Japanese alphabet: 104 Hiragana and 104 Katakana letters Hr 3-4: Identifying words from pictures or objects shown Hr 5-6: Self-introduction 7 Nit 02: 3 Hours Hr 7-8: Asking for directions when shopping Hr 9-10: Time words and Verb Conjugations Hr 11-12: Making light conversation 7 Nit 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives 7 Nit 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language Hr 12-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting 1 Nit 05: 3 Hours Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1 . The course faculty will provide handouts / notes / course material. 2 . Books on Basic Japanese language available in the college library.	Init 01:						3	B Hour	5
In 1 - 2: Identifying words from pictures or objects shown Hr 3-4: Identifying words from pictures or objects shown Hr 5-6: Self-introduction Init 02: 3 Hours Hr 7-8: Asking for directions when shopping Hr 7-8: Asking for directions when shopping Hr 9-10: Time words and Verb Conjugations Hr 11-12: Making light conversation Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verb used for giving things Hr 17-18: Adjectives Jnit 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language Hr 12-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Init 05: 3 Hours Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 1. The course	Hr 1.2.0	reeting word	s and phrases the	lananese alnhahet: 1	04 Hiragana and	104 Katak	ana lette	rs	
Init 02: 3 Hours Init 02: 3 Hours Init 02: 3 Hours If 7-8: Asking for directions when shopping 3 Hours Hr 9-10: Time words and Verb Conjugations 3 Hours Hr 11-12: Making light conversation 3 Hours Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Janit 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language Hr 121-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting 3 Hours Init 05: 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Theory: 15 Hrs Tutorial: Project: Total Hours: 15 Hrs TEXT BOOKS 1 The course faculty will provide handouts / notes / course material. 2 Books on Basic Japanese language available in the college library. 4.1	Ur 3_A. L	dentifying word	rds from nictures (r objects shown	o i mugunu una	10 Titutui	unu rotte		
Init 02: 3 Hours Init 02: 3 Hours Init 02: 3 Hours Hr 7-8: Asking for directions when shopping 3 Hours Hr 9-10: Time words and Verb Conjugations 3 Hours Hr 11-12: Making light conversation 3 Hours Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night 3 Hours Hr 15-16: Verbs used for giving things 3 Hours Hr 17-18: Adjectives 3 Hours Jnit 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language 3 Hours Hr 12-22: Describing the location of things (or where things are) 3 Hours Hr 23-24: Japanese numbers and counting 3 Hours Init 05: 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Tutorial: Project: Total Hours: 15 Hrs 1 The course faculty will provide handouts / notes / course material. 2 Books on Basic Japanese language available in the college library. <td>Hr 5-6: S</td> <td>elf-introducti</td> <td>ion</td> <td>n objects shown</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Hr 5-6: S	elf-introducti	ion	n objects shown					
Hr 7-8: Asking for directions when shopping Hr 9-10: Time words and Verb Conjugations Hr 11-12: Making light conversation Init 03: Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Jnit 04: 17-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Init 05: 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1 1 1 2 Books on Basic Japanese language available in the college library.	Jnit 02:						3	B Hour	5
Hr 9-10: Time words and Verb Conjugations Hr 11-12: Making light conversation Init 03: Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Init 04: Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Init 05: Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 7-8: A	sking for dir	ections when shopp	oing	÷				
Hr 11-12: Making light conversation Init 03: Init 03: Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Juit 04: Hr 19-20: Ways to show liking for the Japanese language Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Init 05: Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 9-10:	Time words a	and Verb Conjugati	ions					
Init 03: 3 Hours Hr 13-14: Expressions to use verbs from morning to night Hr 13-14: Expressions to use verbs from morning to night Hr 13-16: Verbs used for giving things 3 Hours Hr 15-16: Verbs used for giving things 3 Hours Hr 17-18: Adjectives 3 Hours Jnit 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language 3 Hours Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Init 05: 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Text BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library. 4.2 or 10. 1.2 or 10.	Hr 11-12	: Making ligh	it conversation						
Hr 13-14: Expressions to use verbs from morning to night Hr 15-16: Verbs used for giving things Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Juit 04: Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Juit 05: Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Jnit 03:						3	B Hour	5
Hr 15-16: Verbs used for giving things Hr 17-18: Adjectives Juit 04: Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Juit 05: Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 13-14	: Expressions	to use verbs from	morning to night					
Hr 17-18: Adjectives 3 Hours Init 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language 3 Hours Hr 21-22: Describing the location of things (or where things are) 3 Hours Hr 23-24: Japanese numbers and counting 3 Hours Vnit 05: 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Tutorial: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library. 4.2 or or of the course faculty of the course faculty is the course faculty is the college library.	Hr 15-16	: Verbs used	for giving things						
Init 04: 3 Hours Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting 3 Hours Init 05: 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Text BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library. 4.2	Hr 17-18	: Adjectives							
Hr 19-20: Ways to show liking for the Japanese language Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting Solution Solution Solution Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Jnit 04:		1				3	3 Hour	5
Hr 21-22: Describing the location of things (or where things are) Hr 23-24: Japanese numbers and counting 3 Hours Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 19-20	: Ways to sho	ow liking for the Ja	panese language					
Hr 23-24: Japanese numbers and counting 3 Hours Init 05: 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' 3 Hours Hr 29-30: Using 'Te-form' Verb 5 Hrs Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library. 4.2 - 4.2 -	Hr 21-22	: Describing	the location of thin	gs (or where things	are)				
Init 05: 3 Hours Hr 25-26: Making comparisons 3 Hours Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' 4 Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Practical: Project: TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library. 4.2 4.2	Hr 23-24	: Japanese nu	mbers and counting	g					
Hr 25-26: Making comparisons Hr 27-28: Expressions wishing for something, like 'I want to go to Japan!' Hr 29-30: Using 'Te-form' Verb Theory: 15 Hrs Tutorial: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Jnit 05:							3 Hour	5
Hr 27-28: Expressions wishing for something, like 'I want to go to Japan! Hr 29-30: Using 'Te-form' Verb Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 25-26	: Making con	nparisons	1	an to Issan I'				
Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Hr 27-28	: Expressions	wisning for somet	hing, like 1 want to	go to Japan!				
Theory: 15 Hrs Tutorial: Practical: Project: Total Hours: 15 Hrs TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	HF 29-30	: Using Te-I		D (1	D		-1 77	4F 11	
TEXT BOOKS 1. The course faculty will provide handouts / notes / course material. 2. Books on Basic Japanese language available in the college library.	Theo	ory: 15 Hrs	Tutorial:	Practical:	Project:	lot	al Hours	5: 15 H	rs
 The course faculty will provide handouts / notes / course material. Books on Basic Japanese language available in the college library. 	TEXT BO	DOKS				аг. С		3	
2. Books on Basic Japanese language available in the college library.	1. T	he course fac	alty will provide ha	indouts / notes / cou	rse material.				
12	2. B	ooks on Basic	c Japanese language	e available in the co	llege library.				
			4					12~	-

Dr. M.RENUGA, Professor & Head,

- 4

U230	OL1104	Korea	n		L	Τ	P J C		
525		Korea			1	0	0	0	1
Course C	outcomes								
At the en	d of the cours	se, the student will	be able to					•••••	
CO1:	Use single v	owels and consona	ints syllable structu	ire.					
CO2:	Greet others	and introduce ther	nselves.	Notes and the second					
CO3:	Identify time	e, date and week	0						
CO4:	Explain loca	tion and places							
CO5:	Construct si	mple sentences / qu	lestions.						
		Co	ourse Assessment	methods		8			
		Direct			1.00		Indire	ct	
CIE test I	(30)		Total CIE: 100 man	rks					and the second secon
CIE test I	I (30)		Semester End Exa	mination: NIL		Cour	se end	survev	
CIE test I	II (40)	24	- Shirter Dia DAu					-)	
Unit 01: H	Hangeul						3	Hours	3
Single Vo	owels & Conso	onants Syllable Stru	ucture			0			
Tense Co	nsonants								
Aspirated	d Consonants								
Double V	/owels								
Final Con	nsonants								
Double F	inal Consonan	its							
Liaison									
Unit 02: In	ntroduction						3	Hours	5
Greetings									
l alking a	bout names								
Sell-Intro	duction	momhoro							
muoducn	ig my family	members							
Unit 03:	Time and Da	ate					3	Hours	6
Talkin	ng about locat	ion	>	2					
Talkin	ng about dates	and days of the we	ek						
Talkir	ng about doing	g something in the	past						
Unit 04:	Location and I	Places					3	Hours	6
Talking a	bout location								2
Talking a	bout doing son	mething at a location	on	*					
Talking a	bout direction	S					·		
Unit 05: Fi	uture						3	Hours	6
Talkir	ng about doing	something in the	future						
Talkin	ng about plans	for the future							
Talkii	ng about hope	for the future							
Theo	ry: 15 Hrs	Tutorial:	Practical:	Project:	1 7	Fotal	Hours	: 15 H	rs
REFERE	NCES			Г. 					
1	/itamin Korear	n - 1						r	
L							٥	200	1
							a.	201	/
					-		H	HOD	
					, D	r. 1	M.KE	NU	GA,
			ý.			Prot	ressor	& He	ad,
				De	partme	nt of	Humar	nities &	k Lan
<u>.</u>					Sona	Col	lege o	T Tech	1000

4.8.2023 Version 1.0

Programme: B. E / B. Tech

B.E / B. Tech Regulations 202336 1995.

Sona College of Technology, Salem (An Autonomous Institution)

			1		T	T	T	[Total	Course
S.No	Course Code	Course Title	L	Т	P	I	C	Category	Contact	Type*
								category	Hours	Type
		Theory cou	rses					1		
1.	U23ENG201A	Technical English	2	0	0	0	2	HS	30	Т
2.		Vector Calculus and	1,	1				DC		
	023MA1202C	Differential Equations	3	1	0	0	4	BS	60	TT
3.	LIAADINIAAAD	Physics For Civil		+					1	
	023PHY203B	Engineering	4	0	0	0	4	BS	60	Т
4.	LIDODEEDOCA	Basics of Electrical	2	0	0	0	2	EC	4.5	
	023BEE200A	Engineering	5	0	0	0	3	ES	45	I
5.	LI22CE201	Engineering Mechanics	2	1	0	0	1	DC	(0)	
	023CE201	for Civil Engineering	3	1	0	0	4	PC	60	TT
6.		தமிழரும்	1	1						
	U23TAM201	தொழில்நுட்பமும் /	1	0	0	0	1	HS	15	Т
		Tamils and Technology								8
7.	U23GE201	Basic Aptitude- II	2	0	0	0	0	AC	30	Т
a . n		Practical cou	rses		I		L		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
8.	U23PHL210A	Physics Laboratory	0	0	2	0	1	BS	30	L
. 9.		Basics of Electrical								
	U23BEEL2I3A	Engineering Laboratory	0	0	2	0	1	ES	30	L
÷			To	tal (Cred	lits	20			
- 1 - f		Ontional Language	Com	ROOG	**					
10.	U23OL1201	French - II	Cou	ISES			Т		15	
11.	U23OL1202	German - II							15	
12.	U23OL1203	Japanese - II	1	0	0	0	1	OL	15	1 T
13.	U23OL1204	Korean - II						ŀ	15	

Courses of Study for B.E/B.Tech. Semester II under Regulations 2023 (CBCS)

Branch: Civil Engineering

*T- Theory, TT- Theory with Tutorial, TL- Theory with Laboratory, TP- Theory with Project, TLP-Theory with Laboratory and Project, L-Laboratory, LT- Laboratory with Theory, LP- Laboratory with Project

**Students may opt for foreign languages viz., German/French/Japanese/Korean with additional one credit (Not accounted for CGPA calculation)

'on to:			P	Kumar RINCIPAL
Dr.M.Renuga	Dr. R. Malathy	Dr.R.Shivakumar	Dr.J.Akilandeswari	Dr.S.R.R.Senthil
Humanities BoS	Engineering BoS	Academic Council	Dean-Academics	Council & Principal
Chairperson, Science and	Chairperson, Civil	Member Secretary,	Door Academic	Chairperson, Academic
1-4m	Detay	Nivablinas	I Allond	03:80

nd Semester, B.E. Civil Students and Staff, COE

SALEM-636 005

12.01.2024 Version 1.0

Semester 2

B.E/B.Tech Regulations-2023

[
TT)2EN	IC201				T	echnical I	English	DOGE	011.111	L	T	P	J	C
0.	2JEI	0201	I.A.	(Con	ECE	ADS, E, EEE	, AIML, B E, MCT, F	ме, CS Г, IT Br	anches)	, CIVIL,	2	0	0	0	2
Cours	se Oi	utcom	nes									I			l
At the	e enc	l of th	he cou	rse, the	studer	nt wil	ll be able	to					а 1		
CO	l:	Fran fluer	ne sen ncy	tences o	correctl	y, bot	h in writt	en and	spoken	forms o	of langua	age wit	h accura	acy and	
CO	2:	Deve	elop e	ffective	readin	g skil	ls and rei	nforce l	anguag	e skills	require	d for us	sing gra	mmar a	and
		build	ding v	ocabula	ary		8				-		00		
COS	3:	Orga	inise i	deas an	d suppo	orting	argumen	ts logic	ally						
CO	1:	Deve	elop sl	cills for	writing	g conv	versations	, propo	sals, rep	ports an	d transc	oding			
COS	5:	Read	l for u	ndersta	nding a	nd in	terpreting	inform	ation an	nd to ut	ilise info	ormatio	n accor	dingly	
Pre-re	auis	ite:										2			
	1	Knor	wloda	andI	ndorot	andin	a of Crow								
	•	Fund	lamen	tal Lan	guage S	andin Skills	(LSRW)	nmar			× .				
							CO/PO.	PSO M	lapping	,					
			(3/2	/1 indic	ates the	e stre	ngth of co	orrelatio	(n) 3-Sti	, 10110 2-	Medium	n 1-We	ak		
]	Program	nme Oı	utcom	nes (POs)	and Pro	oramn	ne Spec	ific Outo	nomes (PS()e)		
COs	PC	01	PO2	PO3	PO4	PO	5 PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	2		1	2	3	2	3	3	3	3	3	3	3	3	3
CO2	2		2	2	3	2	3	3	3	3	3	3	3	3	3
СОЗ	3		2	2	3	2	3	3	3	3	3	3	3	3	3
CO4	3		3	2	3	2	3	3	3	3	3	3	3	3	3
CO5	3		3	2	3	2	3	3	3	3	3	3 (3	3	3
						Co	ourse Ass	essmer	t metho	ods					
						Direct	•				and the second		Indir	act	
CIE tes CIE tes CIE tes Assign	st I (8 st II (st III st III	8) (8) (8) it/sem	ninar/Q	Quiz (5)	1		Objective Attendar Total CIE Semester	es Test (nce (5) E: 40 ma End Ex	(6) urks kaminat	ion (60)	Cou	urse end	survey	7
Jnit 01:	:					1					· · · · ·		,	6 Hour	s
•	Con Rec Con Rea	npara ommo versa ding	tive ad endati tion w passag	djective ons vriting ges for s	s	infor	mation tra	ansfer		e ,			-1		

Unit 02	2:			•		6 Hours
•	Prepositions, adve	erbs	· · · ·	3		-
	Reading passage y	with multiple choi	as questions reading for	r gist and road	ing for an	
Unit 0	3:	with multiple choi	ce questions, reading to	or gist and read	ing for spe	6 Hours
•	Collocations, dire	ct and indirect spe	ech		l	
•	Memo	P				
•	Proposal: establis	hing a lab, introdu	icing a subject in the cu	rriculum, traini	ng progra	mme for students
•	Short reading pass	sage: gap-filling e	xercise related to gram	nar	01-0-	
Unit 04	1:	-		5.		6 Hours
•	Cause and effect					
•	Technical report v	vriting – feasibilit	y report, accident report	t, survey report		
•	Short reading pass	sages for sentence	matching exercises, pic	king out speci	fic inform	ation in a short
	text			C		
Unit 05	5:					6 Hours
•	Pronouns			n an	I	
•	Transcoding - bar	chart, pie chart, t	abular column			
T	heory: 30 Hrs	Tutorial:	Practical: -	Project:	Total	Hours: 30 Hrs
TEXT	BOOKS					
1.	Technical English	I & II, Dr. M. Rei	nuga et al. Sonaversity,	2016		
2.	Extensive Readin	g	· · · · · · · · · · · · · · · · · · ·			
	1. Who M	oved my Cheese?	- Spencer Johnson-G.	P. Putnam's So	ns	
	2. Discove	er the Diamond in	You - Arindham Chau	dhari – Vikas I	Publishing	House Pvt. Ltd.
	3. Grandn	na's Bag of Storie	s – Sudha Murthy – Per	nguin Random	House, In	dia.
REFE	RENCES					
1.	Norman Whitby, E University Press, 2	Business Benchma 006.	rk – Pre-Intermediate to	Intermediate,	Students	Book, Cambridge
2.	A Course in Comm by Cambridge Uni	nunication Skills, versity Press India	P. Kiranmai Dutt, Geetl a Pvt. Ltd.	ha Rajeevan, C	. L. N. Pra	akash, published

HOD 13/2/24.

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, College of Technology, M - 63

Sona College of Technology

Department of Mathematics

U23M	AT202		SEMESTER - II VECTOR CALCULUS AND DIFFERENTIAL L T P J									J	(
Course	J23MAT202C Common to CIVIL, MECHANICAL and MECHATRONICS 3 1 0 0											ICS	3	1	0	0	4
Course Outcomes																	
At the	end of	the co	ourse, t	he stud	ent wi	ll be a	ble to							6			
CO1:	apply	y the	concept	s of ve	ector d	liffere	ntiatio	on and	integ	ration	to de	termin	e the	line	e. su	rfac	e
	and v	/olum	e integr	als.					-						,		
CO2: apply the classical methods to solve linear ordinary differential equations.																	
CO3:	apply the appropriate numerical methods to solve ordinary differential equations.																
CO4:	apply the appropriate finite difference achieves to achieve the second s																
CUS: apply the appropriate finite difference schemes to solve partial differential equations.																	
Pre-requisites:																	
•	Funda Funda	menta menta	als of el	ementa	ry alg	ebra			• F • F	undam	entals	of trig	gono	netr	у		
					0	0/00	DCO							. y			100
CO/PO, PSO Mapping																	
Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)																	
	PO1	01 PO2 PO3 PO4 PO5 PO6 PO7 PO8 P09 PO10 PO11 PO12 PS01 PS02															
201	3	2		3	2						2	2	3			3	
202	3	2		3	2						2	2	3		:	3	語の記述
203	3	2		3	2			The second			2	2	3		:	3	
204	3	2		3	2						2	2	3			}	A DESCRIPTION OF
205	3	2		3	2						2	2	3		-	;	
			Course	e assess	sment	meth	ods ['	Theory	with	tutoria	ll cou	rse]					
					Direc	t				•		-	In	dire	ct		1000
CIE test	I(8)(Theo	ry)	0	Att	endan	ce (5)									ata Dieg	1996
TE test	II (8) III (8)	(Inec	ory)		Ass	ignme	ent/Qu	iz/Ser	ninar	(5)		Co	urse	end	surv	ev	
Dbjectiv	ves Tes	st (6)	.019)		Sen	al CIE	: 40 n End I	narks	notion	. 60			ui ov	Viiu	Jui v	Cy	
ait 01	VEC	TOR	CALC	ULUS	Joen	105101	LAIQI	SAdiiiii	1411011	. ooma	IKS	1		10	ITan		_
ector (differe	entiat	ion: Sc	alar an	d vect	or val	ued f	unction	15 - (Tradien	tofa	scalar	r noi	12 nt fu	ncti	rs	_
evel su	ırface,	Unit	norma	al vecto	or, Ai	ngle b	etwee	en the	two	surface	es, di	rection	nal d	eriva	ative	s -	_
Diverger	nce of	a ve	ctor po	int fun	ction	- Sol	enoid	al vec	tor –	Curl o	ofav	vector	poin	t fur	ictio	n -	-
Irrotational vector – Problems based on vector identities – Scalar potential.																	
vector integration: Line, surface and volume integrals – Statements of Green's, Stoke's and																	
ectanon	lar par	allelo	nined	1S - S	imple	appl	icatio	ns inv	volvin	g squa	ares,	rectan	gles,	cub	bes	anc	
nit 02	ORD	INAL	RY DIF	FERE	NTIA	LEC	UAT	IONS						12	Uer		_
ligher (order	linear	ordina	ry diff	erenti	al equ	ation	s with	con	stant c	oeffic	ients	- C:	auch	v's	rs and	-
a man da	Legendre's linear ordinary differential equations – Method of variation of parameters.																

Programme: B.E / B.. Tech

Semester II

Sona College of Technology

Unit 03	03 NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL 12 Hours											
Single St series, Eu Multi St and Adar	tep Methods: aller and Modifier ap Methods:	Numerical solution fied Euler and For Numerical solution	on of first order urth order Rung on of first orde	r ordinary differer ge – Kutta method r ordinary differe	itial equation ntial equatio	ns by Taylor's						
Unit 04	PARTIAL D	IFFERENTIAL	FOLIATION	2								
Formation of partial differential equations												
form of partial differential equations – Lagrange's partial differential equation – Clairaut's												
constant coefficients.												
	NUMERICA	I SOLUTION	OF DADTIAL		T							
Unit 05	EQUATION	IS SOLUTION (JF FARIIAL	DIFFERENTIA	L	12 Hours						
Classifica	Classification of second order partial differential equations – Finite difference schemes for the											
solution of	of two dimen	sional Laplace's	and Poisson's	equations on re	ctangular de	omain – One						
dimension	nal heat flow	equation by exp	licit (Bender-S	chmidt's) and im	plicit (Cran	k Nicholson)						
methods.				,	1 (,)						
Theory:	45 Hrs	Tutorial: - 15	Practical: -	Project:	Total Hou	rs: 60 Hrs						
TEXT BO	DOKS:		1	j	100011100	15. 00 1115						
1. T. Veerarajan, "Linear Algebra and Partial Differential Equations", McGraw Hill												
Publishers, 1 ^{°°} Edition, 2018.												
2. 1. Veerarajan, "Engineering Mathematics for Semesters I & II", McGraw Hill Publishers,												
1 st Edition, 2019.												
3. 1.	Veerarajan, "I	Numerical Metho	ds", McGraw H	lill Publishers, 1 st	Edition, 201	8.						
REFERE	NCE BOOKS	S:										
1. J. S	Stewart, "Calc	ulus", Cengage P	ublishers, 8 th E	dition, 2016.								
2. C. Ed	Prasad and 1 ition, 2018.	R. Garg, "Advan	ced Engineerin	ng Mathematics",	, Khanna P	ublishers, 1 st						
3. E. Re	Kreyszig., " print, 2017.	Advanced Engin	eering Mather	natics", Wiley F	ublishers,	10 th Edition,						
4. B.	S. Grewal, "H	igher Engineering	g Mathematics'	'. Khanna Publish	ers 44 th Edit	ion 2018						
5. B.	V. Ramana, "	Higher Engineeri	ng Mathematic	s", McGraw Hill	Publishers,	29 th Reprint,						
2017.												
				and a								
			4	5K								
D. C. IAVABUADATUI												
			ASSOC	IATE PROFESSOR 8	HEAD							
			DEPAR	TMENT OF MATHEM	ATICS,							
			SONA CO	LLEGE OF TECHI	VOLOGY,							
			OALE	AN-030 003. 18mm	nauu.	1						
		The second se	PII	: 0427 - 409999	9.							

12.1.2024 Version 1.0

Programme: B.E / B.. Tech

Regulations 2023

Semester II

	201132	0.20					ENCU	TEEDD		L	Т	Р	J	C
02	3PHY2	(03B)	L L	HYSIC	S FO	R CIVIL	ENGI	NEEKIN	NG	4	0	0	0	4
Cours	e Outc	omes												
At the	end of	the cou	rse, the	studen	t will	be able	to							
CO1	: A	nalyse th	e relatio	on betw	veen a	rrangeme	ent of a	toms ar	nd mate	rial pro	perties.			
CO2	2: Di	iscuss the	e dual n	ature o	f matt	ter and ra	diation	n and th	e appli	cation of	fwave	nature	of parti	cles.
COS	CO3: Describe the basic components of lasers.													
CO	t: Ev	Evaluate the factors affecting architectural acoustics of buildings.												
COS	5: El	ucidate t	he diffe	erent mo	odes c	of heat tra	ansfer.							τ.
Pre-re	quisite	:												
÷	Ba	sic know	vledge i	n atom	ic phy	sics, opti	cs and	moderr	n physic	cs.				
						CO/PO,	PSO N	lapping	5		and a second			
		(3/2	/1 indic	ates the	e strer	$\frac{1}{100} \frac{1}{100} \frac{1}$	orrelatio	on) 3-Sti	rong, 2-	Mediun	n, 1-We	ak		
COs	PO1	PO2	PO3	PO4	4 PO5 PO6 PO7 PO8 P09 PO10 PO11						PO11	PO12	PSO1	PSO
CO1	3	2	-	-		2	2	-	- 5	2		1	-	2
CO2	3	2	-	-	-	2	2	-	-	2	-	1	-	2
CO3	3	2	-		-	2	2		-	2	1-27	1		2
CO4	3	2		-		2	2	- 0.14	-	2		1		2
CO5	3	2	-	-	-	2	2			2		1		2
			L		Co	urse Ass	essmer	nt meth	ods					
				Γ	Direct							Indir	ect	
CIE te CIE te CIE te Assign	est I (8) est II (8) est III (8) ment/:) seminar/	Ouiz (5)		Objective Attendar Total CII Semester	es Test nce (5) E: 40 m : End E	(6) arks xamina	tion (60))	Сог	irse end	l surve	У
Jnit 01	: CRYS	STAL PH	YSICS						(·	2	:	12 Hou	rs
Impor cell - Miller	tance o lattice	of crystal paramete s - Interr	s - Type ers - ba olanar c	es of cr sis) - Se listance	ystals even c e - d s	- Basic d crystal sy pacing ir	lefinitio stems 1 cubic	ons in c and fou lattice	rystallo urteen H - Calcu	graphy Bravais l lation o	(Lattice attices f numb	e -space - Lattic er of at	e lattice e plane coms pe	- unit es and er unit
cell - struct	Atomi ures - I	c radius Polymorr	- Coor ohism a	dinatio nd allo	on nui otropy	mber and - Crysta	d Aton l imper	nic Pacl	king Fa s - Poin	actor for at, line a	SC, B	CC, FC ace def	CC and fects - H	HCI Burge

vector - Crystal Structure – Graphite Structure, Diamond Structure.

12.1.2024 Version I.0 Programme: B.E / B. Tech Semester II Regula

Unit 02: QUANTUM PHYSICS 12 Hours Limitations of classical theory - Dual nature of matter and radiation Compton effect - Expression for Compton shift (no derivation) - de Broglie waves - Heisenberg' Uncertainty Principle - Schrödinger's time independent and time dependent wave equations - Physics significance of wave function - Energy and wave function of an electron trapped in one dimensional box Application of wave nature of particles - Electron microscope - Comparison of optical and electron microscope. 12 Hours Unit 03: LASERS 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO2 laser - Semiconductor laser - Honojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption of ultrasonic flaw detector - A scan display 12 Hours Unit 03: THERMAL PHYSICS / 12 Hours Isadiation - Structive flaw detector - A scan display 12 Hours Unit 05: THERMAL PHYSICS / 12 Hours Isadiation of duction of theat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal conductivity of a										
Limitations of classical theory - Dual nature of matter and radiation Compton effect Expression for Compton shift (no derivation) - de Broglie waves Heisenberg' Uncertainty Principle - Schrödinger's time independent and time dependent wave equations - Physics Significance of wave function - Energy and wave function of an electron trapped in one dimensional box Application of wave nature of particles - Electron microscope - Comparison of optical and electron Microscope Unit 03: LASERS 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission or radiation or Japes of laser - Solid state laser - Nd/XG laser - Ga laser - CO2 laser - Semiconductor laser - Honogunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting a	Unit 02: QUANTUM PHY	SICS				12 Hours				
Compton effect - Expression for Compton shift (no derivation) - de Broglie waves - Heisenberg' Uncertainty Principle - Schrödinger's time independent and time dependent wave equations - Physics significance of wave function - Energy and wave function of an electron trapped in one dimensional box Application of wave nature of particles - Electron microscope - Comparison of optical and electron microscope. 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission of radiation - Types of lasers - Solid state laser - Md:YAG laser - Ga laser - CO: laser - Semiconductor laser - Honojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a	Limitations of clas	sical theory	- Dual na	ature of ma	tter and	d radiation -				
Uncertainty Principle - Schrödinger's time independent and time dependent wave equations - Physics significance of wave function - Energy and wave function of an electron trapped in one dimensional box Application of wave nature of particles - Electron microscope - Comparison of optical and electron microscope - Scanning electron microscope - Transmission electron microscope - Limitations of electron microscope. Unit 03: LASERS / 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO ₂ laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductor to a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutrial: Practical: - Project Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physi	Compton effect - Expre	ession for Comp	oton shift (no de	erivation) - de Br	oglie wav	ves - Heisenberg's				
significance of wave function - Energy and wave function of an electron trapped in one dimensional box Application of wave nature of particles - Electron microscope - Comparison of optical and electror microscope - Scanning electron microscope - Transmission electron microscope - Limitations of electron microscope. Unit 03: LASERS / 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission - Basic components of a laser - Einstein's theory of spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - NdYAG laser - Ga laser - CO: laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity of a good conductor - Forbe's method - Measurement of thermal conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Compan Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Cha	Uncertainty Principle - S	Schrödinger's tim	e independent a	nd time dependen	t wave ec	uations - Physica				
Application of wave nature of particles - Electron microscope - Comparison of optical and electron microscope - Scanning electron microscope - Transmission electron microscope - Limitations of electron microscope - Unit 03: LASERS / 12 Hours - Stimulated absorption - population inversion - meta stable state spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Md:YAG laser - Ga laser - CO ₂ laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours - Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Pactors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Nuit 05: THERMAL PHYSICS / 12 Hours - Unit 05: THERMAL PHYSICS / 12 Hours - Reverberation - Specific head temperature - Modes of heat transfer - Conduction, convection and radiation - Specific head capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductor i Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project: Total Hours: 60 Hrs Texper 2017. Reversed and applications of theat ransfor - Conduction in buildings - Thermal radiation - Specific head applications of thermal radiation - Thermal insulation in buildings - Thermal radiations - Theory: 60 Hrs Tutorial: - Practical: - Project: Total Hours: 60 Hrs Texper 2017. Reversed Edition 2019. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. References 1. MiN. Avadhanulu, P.G. Kshirsagar , "A	significance of wave fund	ction - Energy and	d wave function o	of an electron trap	oed in one	dimensional box ·				
microscope - Scanning electron microscope - Transmission electron microscope - Limitations of electron microscope. Unit 03: LASERS 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ca laser - CO ₂ laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. 12 Hours Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific hear capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: - Project:- Total Hours: 60 Hrs TEXT BOOKS <tr< td=""><td>Application of wave na</td><td>ture of particles</td><td>- Electron micro</td><td>oscope - Compari</td><td>son of op</td><td>tical and electror</td></tr<>	Application of wave na	ture of particles	- Electron micro	oscope - Compari	son of op	tical and electror				
microscope. 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission - Basic components of a laser - Einstein's theory of spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO: laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. 12 Hours Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies - Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Not Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma rediations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project:- Total Hours: 60 Hrs Textrepo KS	microscope - Scanning e	lectron microscoj	pe - Transmissior	electron microsco	ope - Limi	itations of electror				
Unit 03: LASERS 12 Hours Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission - Types of lasers - Solid state laser - Einstein's theory of spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Galaser - CO2 laser - Semiconductor laser - Honojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a god conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project: Total Hours: 60 Hrs Text Hours: 60 Hrs	microscope.									
Energy level - normal population - Stimulated absorption - population inversion - meta stable state spontaneous emission - stimulated emission - Basic components of a laser - Einstein's theory of spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO: laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutorial: - Project:- Total Hours: 60 Hrs TEXT BOOKS 1 M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Compan Ltd, New Delhi 2014. <td>Unit 03: LASERS</td> <td><i>ų</i>.</td> <td></td> <td></td> <td></td> <td>12 Hours</td>	Unit 03: LASERS	<i>ų</i> .				12 Hours				
spontaneous emission - stimulated emission - Basic components of a laser - Einstein's theory of spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO ₂ laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Compan Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Energy level - normal p	opulation - Stim	ulated absorption	n - population inv	version - 1	meta stable state ·				
spontaneous and stimulated emission of radiation - Types of lasers - Solid state laser - Nd:YAG laser - Ga laser - CO ₂ laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Not Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Compan, Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	spontaneous emission -	stimulated emi	ission - Basic co	omponents of a l	aser - Ei	nstein's theory o				
laser - CO2 laser - Semiconductor laser - Homojunction and hetero junction laser - Holography Construction and reconstruction of hologram- Application of laser in industry - Cutting, welding and drilling - Medical applications - Lasik. Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabiné's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: - Project:- Total Hours: 60 Hrs TEXT BOOKS 1 M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2 D. K. Bhattacharya, Poonam Ta	spontaneous and stimula	ted emission of r	adiation - Types o	of lasers - Solid sta	te laser - N	Id:YAG laser - Gas				
Construction and reconstruction of hologram- Application of laser in industry – Cutting, welding and drilling – Medical applications – Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No: Destructive Testing – Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project:- Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	laser - CO2 laser - Se	miconductor lase	er - Homojunctio	on and hetero jur	nction lase	er - Holography				
drilling – Medical applications – Lasik. Unit 04: ACOUSTICS AND ULTRASONICS / 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing – Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermat conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of thermal radiations. Theory: 60 Hrs Tutorial: - Practical: - Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Construction and recons	struction of holos	gram- Application	n of laser in indu	stry – Cut	ting, welding and				
Unit 04: ACOUSTICS AND ULTRASONICS 12 Hours Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing - Ultrasonic flaw detector - A scan display 12 Hours Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1 M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity,	drilling – Medical applic	ations – Lasik.			-	0 0				
Classification of sound - Pitch, Loudness, Intensity level, Phon and Timbre - Reverberation, Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - No Destructive Testing – Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Compant Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2.	Unit 04: ACOUSTICS AN	D ULTRASONI	cs 🗸			12 Hours				
Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Nor Destructive Testing - Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Project: Total Hours: 60 Hrs 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. <td>Classification of sound - 1</td> <td>Pitch, Loudness, I</td> <td>ntensity level, Pho</td> <td>on and Timbre - Re</td> <td>everberatio</td> <td>on,</td>	Classification of sound - 1	Pitch, Loudness, I	ntensity level, Pho	on and Timbre - Re	everberatio	on,				
Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Nor Destructive Testing – Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS ///////////////////////////////////	Reverberation time - Sabine's formula and its importance (no derivation) - Sound absorbing materials -									
Production of ultrasonic waves by magnetostriction and piezoelectric methods - Acoustic grating - Nor Destructive Testing – Ultrasonic flaw detector - A scan display Unit 05: THERMAL PHYSICS / 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermat conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Compan Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Absorption Coefficient and its determination - Factors affecting acoustics of buildings and their remedies -									
Destructive Testing – Ultrasonic flaw detector - A scan display 12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of therma conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. J. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Production of ultrasonic	waves by magne	etostriction and p	viezoelectric metho	ds - Acou	stic grating - Nor				
12 Hours Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermat conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Destructive Testing – Ult	rasonic flaw detec	ctor - A scan displ	ay						
Heat and temperature - Modes of heat transfer - Conduction, convection and radiation - Specific heat capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermat conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Unit 05: THERMAL PHYS	SICS				12 Hours				
 capacity - Thermal capacity and coefficient of linear thermal expansion - Thermal conductivity Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermal conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	Heat and temperature -	Modes of heat f	transfer - Conduc	ction, convection a	and radiat	ion - Specific hea				
 Measurement of thermal conductivity of a good conductor - Forbe's method - Measurement of thermat conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	capacity - Thermal cap	acity and coeffi	icient of linear	thermal expansior	n - Thern	nal conductivity				
conductivity of a bad conductor - Lee's disc method - Radial flow of heat - Cylindrical flow of heat Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar , "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	Measurement of therma	l conductivity of	a good conducto	or - Forbe's metho	d - Measu	rement of therma				
Practical applications of conduction of heat - Thermal insulation in buildings - Thermal radiations Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS 1. M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	conductivity of a bad co	onductor - Lee's	disc method - Ra	adial flow of heat	- Cylindr	ical flow of heat				
Properties and applications of thermal radiations. Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS Image: Source of the source	Practical applications of	conduction of h	heat - Thermal i	nsulation in build	ings - Th	ermal radiations				
Theory: 60 Hrs Tutorial: Practical: Project: Total Hours: 60 Hrs TEXT BOOKS	Properties and applicati	ons of thermal rad	diations.							
 TEXT BOOKS M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Compan Ltd, New Delhi 2014. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	Theory: 60 Hrs	Tutorial:	Practical:	Project:	Total	Hours: 60 Hrs				
 M.N. Avadhanulu, P.G. Kshirsagar, "A Textbook of Engineering Physics", S.Chand & Company Ltd, New Delhi 2014. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	TEXT BOOKS				17 ¹⁶					
 Ltd, New Delhi 2014. 2. D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	1. M.N. Avadhanulu	ı, P.G. Kshirsagaı	r, "A Textbook o	of Engineering Phy	sics", S.C	Chand & Company				
 D. K. Bhattacharya, Poonam Tandon "Engineering Physics" Oxford University Press 2017. REFERENCES "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	Ltd, New Delhi 20)14.								
REFERENCES 1. "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. 2. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	2. D. K. Bhattacharya	a, Poonam Tandor	n "Engineering Pl	nysics" Oxford Uni	versity Pre	ess 2017.				
 "Engineering Physics", Sonaversity, Sona College of Technology, Salem Revised Edition 2019. B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	REFERENCES			. · · · ·						
 B. K. Pandey and S. Chaturvedi, "Engineering Physics", Cengage Learning India Pvt. Ltd., Delh 2021. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009. 	1. "Engineering Phy	sics", Sonaversity	, Sona College of '	Technology, Salem	Revised E	dition 2019.				
2021. 3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	2. B. K. Pandey and	S. Chaturvedi, "	Engineering Phys	sics", Cengage Lea	arning Ind	ia Pvt. Ltd., Delhi				
3. R.Wolfson, "Essential University Physics", Volume 1 & 2. Pearson Education (Indian Edition), 2009.	2021.									
	3. R.Wolfson, "Esser	tial University Ph	nysics", Volume 1	& 2. Pearson Educ	ation (Indi	an Edition), 2009.				
						1				

Programme: B.E / B.. Tech 12.1.2024 Version 1.0

•

4.	William D. Callister Jr., David G. Rethwisch, "Callister's Materials Science and Engineering", 10th
	Edition, Global Edition 2019.
5.	R. Murugeshan, Kiruthiga Sivaprasath, "Thermal Physics", S.Chand & Company Ltd, New Delhi
	2018.

12.1. my

Dr. C. SHANTHI, M.Sc., M.E., Ph.D., Professor of Physics Head, Department of Sciences Sona College of Technology (Autonomous) SALEM-636 005.

1. frd

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 005.

U23B]	EE206A									T	The second se	D-	1 T	C
a de la composición d	U23BEE206A BASICS OF EL				FELF	CTRICA	AL EN	GINEE	RING		1)	
Course	uteomos	12						and an		3	0	0	0	3
At the end	d of the o	ourse	the st	udent v	vill be	able to	n di di i n			and the second sec			-	<u>1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997</u>
At the che			, 110 31	DO			1		•	office Maria				
CO1:	Analy	ze the	variou	us DC &	é AC	circuits a	ind find	the circ	cuit par	ameters.		15 1 S		1.21-
CO2:	Select	the D	C mac	chines f	or dif	ferent app	olicatio	ns.	25 ⁸		100 (A (A (A (A (A (A (A (A (A (s P	- Autor	140
CO3:	Interp	ret the	e const	ruction	and v	vorking p	rinciple	e of sing	le phas	e Transf	former	& AC 1	nachine	es.
CO4:	Describe the various types of measuring techniques and power supply.													
CO5:	: Discuss the electrical systems in buildings and protective devices.													
Pre-requi	isite:		ny de con Ny de con		73+14 - 14	Albari I China ang			- 1 - 5 					
1.128	Physic	s, Ma	athema	atics	in the		· · · · ·						ats osti	
						CO/PO,	PSO M	lapping	i 111	an ga haan j			6	
		(3/2/	1 indic	ates the	e strer	ngth of co	orrelatio	on) 3-Str	ong, 2-	Medium	n, 1-We	ak		
CO-	Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)													
P	O1 P	02	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	1	2	1	1	1	1	1	1	1	1	3	1
CO2	2	2	1	1	1	1	1	1	1	1	1	1	3	1
<u>CO3</u>	2	$\frac{2}{2}$	1	1	1	1			1		1	1	3	1
CO4 CO5	2	2	1	2			1	1	1	1	1	1	3	1
	NIT'S	1	Carlos.	<u>.</u>	Co	ourse Ass	essmer	nt meth	ods		1. 11 N		er en lest Sans (1) Ste	
				I	Direct						utoren 200	Indir	ect	
CIE test I	(8)	-			. -	Objective	es Test	(6)						
CIE test I	I (8)					Attendar	nce (5)			·	-			
CIE test I	II (8)					Total CIE	E: 40 ma	arks			Coi	irse enc	l surve	У
Assignme	ent/semi	inar/Q)uiz (5)	<u>.</u>	Semester	End E	xamina	tion (60)				
Unit 01: D	C & A	C CIF	RCUIT	[S	2.4 M.	Markig	CLAG	8.20				-	9 Hour	rs -
DC circu	its: Defi	initior	n of V	oltage,	Curre	nt, Elect	romotiv	e force	, Resis	tance, P	ower &	Energ	y, Ohn	ıs law
and Kirch	nhoff's I	.aw &	t its ap	plicatio	ons - S	eries and	Paralle	el circui	ts - Star	r-Delta t	ransfor	mation		
AC Circu sinusoida	iits: Ger I AC wa	neration vefor	on of a m - Se	alternat ries RI	ing er	nf - RMS & RLC c	S value ircuits.	, Avera	ge valu	le, Peak	factor	and Fo	rm fac	tor for
Unit 02: D	C MAC	CHIN	ES		,			-	•				9 How	rs
DC Gene	rator: C	onstru	uction	of DC	genera	ator - Wo	orking p	orinciple	e of DC	genera	tor - El	MF equ	ation -	Types
of DC get DC Moto	nerator - or: Const	- App	licatio on of E	ns. DC mote	or - W	/orking p	rinciple	e of DC	motor	- Back H	EMF - T	Types o	f DC n	notor -
Application	ons.					01					0		-	-
											Q.	PADI	MA. M.	E., Ph.[
T	2 1 2024	Ver	sion T O	1	B.F.	Civil Engin	eerina	and a star	Semest	er II	PR	ofessor	and H	ead,

Sona College of Technology Salem-636 005. Tamil Nadu.

Unit 03	B: SINGLE PHASE	TRANSFORM	ER & INDUCTI	ON MOTORS	9 Hours					
Transi Transi	former: Constructio formation ratio – Ap	n and working proplications.	rinciple of transfo	rmer - EMF equa	tion - types of transformers -					
Induct worki	tion motors: Constr ng principle of three	uction and work phase induction	ing principle of s motor – Torque –	ingle phase induction slip characteristics	tion motor, Construction and s – Applications.					
Unit 04	4: MEASURING T	ECHNIQUES A	ND POWER SU	PPLY	9 Hours					
Measu Resist Capac Power Applie	uring techniques: Stance – Wheatstone eitance – Schering B r supply: Constructications.	Strain measuring bridge, Megger - ridge – Measuren ion and working	techniques usin Measurement of nent of energy –D principle of Unir	g electrical strain Inductance – Ande igital Energy Mete iterrupted Power S	n gauge - Measurement of rson Bridge, Measurement of r. Supply (UPS) and its types –					
Unit 05	5: - ELECTRICAL	SYSTEMS IN I	BUILDINGS		9 Hours					
TEXT	heory: 45 Hrs	Tutorial:	Practical:	Project:	Total Hours: 45 Hrs					
TEXT	F BOOKS	Fourt book of Elon	triant Tachnology	(Volume 1&2)"	Chand & Co Ltd 2021					
1.	D.L. Hiciaja, A	PORT DOOK OF LAC	Theat Technology		on multicotions Third					
2.	S.K. Bhattacharya, Impression, 2019.	Basic Electrical	and Electronics i	ingineering , rears	on publications, Third					
REFE	ERENCES	. ~	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	False, v						
1.	A.K.Sawheny, "A course in Electrical and Electronics Measurement & Instrumentation", DhanpatRai and Co, 9th Edition, 2012.									
2.	Muthusubramanian 2007, Tata McGra	n R, Salivahanan w-Hill publishing	S, "Basic Electric company limited	ical and Electroni	cs Engineering", 3rd Edition					
3.	Charles K. Alexan McGraw-Hill - Ma	der, Matthew N. (ay 2022.	O. Sadiku "Funda	mentals of Electric	Circuits" 7 th Edition,					
4.	"Earthing and Grounding of electrical and electronic systems and equipment", Abdallah Saad P E, 2020.									

Dr.S.PADMA, M.E., Ph.D., Professor and Head, Department of EEE, Sona College of Technology Salem-636 005. Tamil Nadu.

~

							1.							
1	J23C	E201	Eng	ineerin	g Mecl	nanics f	for Civi	il Engin	ieering	L	T	P	J	C
					8					3	1	0	0	4
Cours	se Or	itcomes					1							
At the	e end	of the cou	rse, the	e studer	nt will	be able	to							
CO	l:	Apply the particle in	variou 2d and	is meth 3d.	ods to	determ	ine the	resulta	nt force	es and	its equ	ilibriun	n acting	; on a
co	2.	Apply the	conce	pt of r	eaction	forces	(non-c	oncurre	ent cop	lanar ar	nd none	coplana	r force	s) and
	- 1	moment of	f vario	us supr	port sys	stems v	vith rig	id bodi	es in 2	d equil	ibrium.	reduci	ng the	force.
		moment, a	nd coup	ple to an	n equiva	alent for	rce - co	uple sys	stem act	ting on a	rigid bo	dies in	2d.	,
CO	3:	Apply the	concep	ts of lo	cating	centroid	ds / cen	ter of g	gravity of	of vario	us sect	ions/ vo	olumes	and to
	the second se	find out are	ea mon	nents of	inertia	for the	section	s and m	ass mor	ment of	inertia	of solid	s.	
CO	1 :	Apply the	concep	ts of fri	ctional	forces a	at the co	ntact su	irfaces	of vario	us engi	neering	system	s.
CO	5:	Apply the	variou	s metho	ods of	evaluati	ing kine	etic and	kinem	atic par	ameter	s of the	rigid	bodies
		subjected t	o conci	urrent c	oplanar	forces				•			Ŭ	
Pre-re	quis	ite: Basic P	hysics										•	
	1		<u> </u>					-						
					1	20/20	DEO M	[ammin a	- 1.1 1 1 1 1 1 1					
		(3/2	/1 india	rates the	a strong	th of co	1 30 W	apping	5 	Modiur	n 1 1470	al.		
Ţ		(0/2	Program	nma Or	teomo	$\frac{(P\Omega_c)}{(P\Omega_c)}$	and Pro	nij 5-5ti	Space	fic Out	n, 1-vve			
COs	PO	1 PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
COL	2									1010		1012	1001	1002
	د.		. د		1	-		-	-		-	1	3	-
CO2	3	2	3	3	1		- 	-	-		-	1	3	-
CO3	3	3	3	3	1	-	-	-	-		•	1	3	-
CO4	. 3	3	3	3	1	-	-	-			-	1	3	
CO5	3	3	3	3	1	-		-	<u> </u>			1	3	-
, ina nora na l à		and discovered			Cou	rse Ass	essmen	t meth	nds	<u>Esclationati</u>				
•				F)irect							India	aat	
CIE te	st I (8	<u>}}</u>				hiective	e Tect ((6)				Inun	eu	
CIE te	st II (8)			A	ttendar	1 ce (5)	0)						
CIE te	st III	(8)			T	otal CIE	E: 40 ma	rks			Cou	irse enc	l survey	7
Assign	ımen	t/seminar/Q	Quiz (5)	Se	emester	End Ex	aminat	ion (60)					
UNIT	I - S	TATICS C)F PAI	TICL	ES					I		9	+3 Hou	rs
Funda	ment	al Concepts	s and P	rinciple	s, Syste	ems of l	Units, N	fethod	of Prob	lem Sol	utions	Statics	of Parti	icles -
Forces	in a	Plane, Res	ultant o	of Force	es, Reso	olution	of a For	ce into	Compo	onents, l	Rectang	ular Co	mpone	nts of
a Fore	e, Un	it Vectors.	Equilit	rium of	f a Parti	icle- Ne	wton's	First La	w of M	lotion.	Free-Bo	dy Dia	Tams	

UNIT II - EQUILIBRIUM OF RIGID BODIES	9+3 Hours
Principle of Transmissibility, Equivalent Forces, Vector Product of Two Vectors, Mome Point, Varignon's Theorem, Rectangular Components of the Moment of a Force, Mom an Axis, Couple - Moment of a Couple-Further Reduction of a System of Forces, Ed Reactions at Supports and Connections	nt of a Force about a ent of a Force abou quilibrium in Two
UNIT III - PROPERTIES OF SURFACES AND SOLIDS	9+3 Hours
Determination of Areas and Volumes - First moment of area and the Centroid of se	ections – Rectangle
circle, triangle from integration - T section, I section, Hollow section by using standard	formula Second and
product moments of plane area - Rectangle, triangle, circle from integration - T section	n. I section by using
standard formula - Parallel axis theorem and perpendicular axis theorem - Polar n	noment of inertia –
Principal moments of inertia of plane areas - Principal axes of inertia.	
JNIT IV - FRICTION	9+3 Hours
Frictional force - Laws of Coulomb friction - Angle of friction - cone of friction - Equi	librium of bodies on
inclined plane – Ladder friction.	
JNIT V - DYNAMICS OF PARTICLES	9+3 Hours
Kinematics - Rectilinear Motion and Curvilinear Motion of Particles. Kinetics- Newto	n's Second Law of
Motion -Equations of Motions, Dynamic Equilibrium, Energy and Momentum Methods	- Work of a Force
Kinetic Energy of a Particle, Principle of Work and Energy, Principle of Impulse and Mo	mentum. Impact.
Theory: 45 Hrs Tutorial: 15 Hrs Practical: Project: Tota	l Hours: 60 Hrs
TEXT BOOKS	
1. Beer Ferdinand P, Russel Johnston Jr., David F Mazurek, Philip J Cornwell, Sanje	evSanghi Vector
Mechanics for Engineers: Statics and Dynamics, McGraw Higher Education., 11th	Edition, 2017.
 Hibbeler, R.C., "Engineering Mechanics", Vol. 1 Statics, Vol. 2 Dynamics, Pear Pvt. Ltd., (2017). 	son Education Asia
3. Vela Murali, "Engineering Mechanics-Statics and Dynamics", Oxford University I	Press, 2018.
REFERENCES	
1. K.L. Kumar, "Engineering Mechanics" Tata McGraw-hill, 2017, 4th Edition	
2. S.S. Bhavikatti, "Engineering Mechanics". New Age International Publishers 200	6
3. R. S. Khurmi, "Engineering Mechanics", S. Chand Publishers, 2018.	
4. Dr. N. Kotteswaran, "Engineering Mechanics - Statics & Dynamics" Sri Balaii Pu	blications 2004



7.14

Programme: B.E / B. Tech

Semester II

			L	Т	P	T	C	
U231	TAM201	தமிழரு	ம தொழில்நுட்பமும்	1	0	0	0	1
Course C	Outcomes	1,			L			
At the en	d of the cour	rse, the student wi	ll be able to					
CO1:	Describe th	e weaving and cer	amic technology			5 .		
CO2:	Explain the	design and construct	ion technology					
CO3:	Analyse the	manufacturing techn	ology	1. 1.				- CONTRACTOR
CO4:	Describe the	agriculture and irrig	gation technology	2		2 000 - 2000 - 2000 - 2000 - 2000 - 2000 193		
CO5:	Explain the	Scientific Tamil and	Tamil Computing					
	J	C	Course Assessment methods					
		Direc	t			Indired	ct	
CIE test I	(30)		Total CIE: 100 marks					
CIE test I CIE test I	I (30) II (40)		Semester End Examination: NI	L	Cour	se end	survey	
Unit 01: W	EAVING AN	D CERAMIC TECH	INOLOGY	l		2	Hours	
சங்க கா பாண்டங்க Jnit 02: DI அலகு II சங்க கா வடிவமைப் பற்றிய வி மற்றும் பிழ மதுரை மீ காலத்தில் Jnit 03: M	லத்தில் நெச ளில் கீறல் கு ESIGN AND C வடிவயை லத்தில் வடி பிரங்கள் – ற வழிபாட்டுத் னாட்சி அம்ம சென்னையில் ANUFACTUR	வுத் தொழில் – றியீடுகள். CONSTRUCTION T பட்டி மற்றும் கட்டிடத் வமைப்பு மற்றும் லத்தில் கட்டுமான மாமல்லபுரச் சிற்பங் தலங்கள் – நாயக் ன் ஆலயம் மற்றும் இந்தோ–சாரோசெ ING TECHNOLOG	பானைத் தொழில்நுட்பம் – க ECHNOLOGY 5 தொழில்நுட்பம்: கட்டுமானங்கள் & சங்க கால பொருட்களும் நடுகல்லும் – சிலா களும், கோவில்களும் – சோழர் கர் காலக் கோயில்கள் – மாதிர திருமலை நாயக்கர் மஹால் – செ னிக் கட்டிடக் கலை.	ருப்பு சில லத்தில் ல ப்பதிகாரத் காலத்த 1 கட்டடை சட்டிநாட்டு	லப்பு பா லீட்டுப் ந்தில் மே வப்புகள் விடுகள் விடுகள்	ாண்டங்க 3 பொருப் ஹட அ நங்கோய பற்றி அ ள் – பிர	கள் Hours 3 களில் முமப்பு பில்கள் முறிதல், ரிட்டிஷ்	
ച്ചலക്ര 111	உற்பக்கி	க் கொடில் நட்பும்:				5	2	
கப்பல் கட் வரலாற்றுச் உருவாக்கு – எலும்புத்	டும் கலை சான்றுகளா ம் தொழிற்சா துண்டுகள் –	– உலோகவியல் – க செம்பு மற்றும் லைகள் – கல்மணிச தொல்லியல் சான்று	- இரும்புத் தொழிற்சாலை – இ தங்க நாணயங்கள் – நாணய கள், கண்ணாடி மணிகள் – சுடும கள் – சிலப்பதிகாரத்தில் மணிகளி	ரும்பை பங்கள் ண் மணி 1ன் வகை	உருக்குத அச்சடித்த கள் – சட கள்,	நல், எல் தல் – ங்கு மன	ஃகு ~ மணி னிகள்	
Jnit 04: AC	BRICULTURE	E AND IRRIGATIO	N TECHNOLOGY			3	Hours	
அலகு IV அணை, ஏ கால்நடைச செயல்பாடு பண்டைய	<u>வேளாண்</u> ரி, குளங்கள், ஞக்காக வ கள் – கடல்ச அறிவு – அறி	<u>ாமை மற்றும் நீர்ப்பா</u> , மதகு – சோழர்க டிவமைக்கப்பட்ட ரார் அறிவு – மீன்வ வுசார் சமூகம்.	சனத் தொழில் நுட்பம் : ஸக் குமுழித் தூம்பின் முக்கியத்த கிணறுகள் – வேளாண்மை மு பளம் – முத்து மற்றும் முத்துக்குவ	தலம் – ச ற்றும் சே ரித்தல் –	கால்நடை வளாண் பெருங்	. பராமர மைச் க கடல் கு	3 ரிப்பு – சார்ந்த தறித்த	
nit 05: SC	IENTIFIC TA	MIL & TAMIL CO	MPUTING			3	Hours	· ·
அலகு V அறிவியல் மென்பொரு தமிழ் அகர	அறிவியல் தமிழின் வள நட்கள் உருவ ாதிகள் – சொ	ல் தமிழ் மற்றும் கன ரச்சி –கணித்தமிழ் ாக்கம் – தமிழ் இஞ ாற்குவைத் திட்டம்.	<mark>ளித்தமிழ்:</mark> வளர்ச்சி — தமிழ் நூல்களை ணையக் கல்விக்கழகம் – தமிழ் ப	மின்பதி மின் நூல	ப்பு செய் கம் – (பதல் – இணைய	3 தமிழ் பத்தில்	

12.1.2024 Version 1.0 Programme:

Т	heory: 15 Hrs	Tutorial:	Practical:	Project:	Total Hours: 15 Hrs					
TEXT	BOOKS									
1.	தமிழக வரலாறு கே.கே. பிள்ளை (– மக்களும் பண் வெளியீடு: தமிழ்நா	பாடும் – rடு பாடநூல் மற்று	ம் கல்வியியல் பல	ணிகள் கழகம்).					
2.	2. கணினித் தமிழ் –முனைவர் இல. சுந்தரம். (விகடன் பிரசுரம்). கீழடி –வைகை நதிக்கரையில் சங்ககால நகர நாகரிகம் (தொல்லியல் துறை வெளியீடு) பொருநை – ஆற்றங்கரை நாகரிகம். (தொல்லியல் துறை வெளியீடு)									
REFE	ERENCES									
3.	Social Life of Tamils (Dr.K.K.Pillay) A joint publication of TNTB & ESC and RMRL – (in print)									
4.	Social Life of the Tai Studies.	mils - The Classical I	Period (Dr.S.Singara	velu) (Published by:	International Institute of Tamil					
5.	Historical Heritage of International Institu	of the Tamils (Dr.S.\ te of Tamil Studies)	/.Subatamanian, Dr	K.D. Thirunavukkara	su) (Published by:					
6.	The Contributions o Tamil Studies.)	f the Tamils to India	an Culture (Dr.M.Va	larmathi) (Published	by: International Institute of					
7.	7. Keeladi - 'Sangam City Civilization on the banks of river Vaigai' (Jointly Published by: Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation, Tamil Nadu)									
8.	8. Studies in the History of India with Special Reference to Tamil Nadu (Dr.K.K.Pillay) (Published by: The Author)									
9.	Porunai Civilization Educational Services	(Jointly Published b Corporation, Tami	y: Department of A I Nadu)	chaeology & Tamil N	ladu Text Book and					
10	10 Journey of Civilization Indus to Vaigai (R.Ramakrishna) (Published by: RMRL) – Reference Book.									

74 THIE HOD

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 005.

Programme:

B.E / B.. Tech Regulations 2023

		[T		1	1		1
U23	ГАМ201	TAMIL	S AND TECHNOLOG	GY -	L	T	Р	J	C
					1	0	0	0	1
Course (Dutcomes			2 2					
At the er	nd of the coui	rse, the student w	ill be able to						
CO1:	Describe th	e weaving and cer	ramic technology						
CO2:	Explain the	design and construct	tion technology						
CO3:	Analyse the	manufacturing techn	ology						
CO4:	Describe the	agriculture and irri	gation technology					Ne.	2
CO5:	Explain the	Scientific Tamil and	Tamil Computing				1		2
	-l	(Course Assessment m	ethods				.	
		Direc	zt				Indire	ct	-
CIE test l	(30)		Total CIE: 100 mark	S					
CIE test I CIE test I	I (30) II (40)		Semester End Exam	ination: NIL		Cour	se end	survey	
Unit 01: W	EAVING AN	D CERAMIC TECH	INOLOGY	· · · · · · · · · · · · · · · · · · ·			3	Hours	 1
Weaving - Graffiti	Industry during on Potteries	g Sangam Age – Cer	ramic technology – Blac	ck and Red War	e Potte	eries (BF	RW)		
U nit 02: D	ESIGN AND (CONSTRUCTION	TECHNOLOGY				3	Hours	
Build Sculp of Na Hous	ling materials a otures and Tem ayaka Period - es, Indo - Sarad	and Hero stones of pples of Mamallapur Type study (Madu cenic architecture at	Sangam age – Details am - Great Temples of rai Meenakshi Temple Madras during British I	of Stage Const Cholas and ot Thirumalai M Period.	ructior her wo Jayaka	ns in Sila rship pla r Mahal	appathik aces - To - Chett	aram - emples i Nadu	
J nit 03: M	ANUFACTU	RING TECHNOLO	GY				3	Hours	
Art o sourc -Shel	f Ship Building e of history - N l beads/ bone b	g - Metallurgical stud Minting of Coins – E beats - Archeologica	dies - Iron industry - Iro eads making-industries l evidences - Gem stone	n smelting, stee Stone beads -C types describe	el -Cop Blass b d inSil	oper and eads - To appathik	gold- Corracotta caram.	oins as beads	1. 1.
J nit 04: A	GRICULTURI	E AND IRRIGATIC	N TECHNOLOGY				3	Hours	0
Dam, Tan for cattle Knowledg	k, ponds, Sluic use - Agricultu e of Ocean - K	ce, Significance of l are and Agro Proce nowledge Specific S	Kumizhi Thoompu of C ssing - Knowledge of S Society	Chola Period, A Sea - Fisheries	nimal – Pea	Husband rl - Cond	dry - We che divi	ells des ng - Ar	igned icient
J nit 05: SO	CIENTIFIC TA	MIL & TAMIL CO	MPUTING		1		3	Hours	
Developm Software -	ent of Scienti - Tamil Virtual	fic Tamil - Tamil Academy – Tamil	computing – Digitaliz Digital Library – Online	ation of Tamil Tamil Diction	Book aries -	as – De -Sorkuva	velopme ai Projec	ent of 7	ſamil
Theo	ry: 15 Hrs	Tutorial:	Practical:	Project:		Total	Hours:	15 Hr	s
TEXT BO	OKS								
1. தப கே	ிழக வரலாற .கே. பிள்ளை	µ – மக்களும் பன (வெளியீடு: கமிம்	<mark>னபாடும்</mark> – நாடு பாடநால் மற்றும்	கல்வியியல்	പഞ്ഞി	கள் கட	மகம்).		
2. கூ கூ	னினித் தமிழ் ஷ –வைகை ாருநை – ஆற்	முனைவர் இல. நதிக்கரையில் சர ற்றங்கரை நாகரிக	சந்தரம். (விகடன் பி கக்கால நகர நாகரிக ம. (தொல்லியல் துறை	ரசுரம்). ம் (தொல்லிய ற வெளியீடு)	ல் துஎ	றை வெ	ளியீடு)	•	
T	1 2024 Van	ion IO Dea			DT	1 0 1	.: 20	22	

Ċ

REFE	RENCES
1.	Social Life of Tamils (Dr.K.K.Pillay) A joint publication of TNTB & ESC and RMRL – (in print)
2.	Social Life of the Tamils - The Classical Period (Dr.S.Singaravelu) (Published by: International Institute of Tamil Studies.
3.	Historical Heritage of the Tamils (Dr.S.V.Subatamanian, Dr.K.D. Thirunavukkarasu) (Published by: International Institute of Tamil Studies).
4.	The Contributions of the Tamils to Indian Culture (Dr.M.Valarmathi) (Published by: International Institute of Tamil Studies.)
5.	Keeladi - 'Sangam City C ivilization on the banks of river Vaigai' (Jointly Published by: Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation, Tamil Nadu)
6.	Studies in the History of India with Special Reference to Tamil Nadu (Dr.K.K.Pillay) (Published by: The Author)
7.	Porunai Civilization (Jointly Published by: Department of Archaeology & Tamil Nadu Text Book and Educational Services Corporation, Tamil Nadu)
8.	Journey of Civilization Indus to Vaigai (R.Ramakrishna) (Published by: RMRL) – Reference Book.

1.1 m/ 1/24. HOD

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Department of Humanities & Languages,

B.E / B.. Tech Regulations 2023

1123	GE201			BA	SIC AP	TITUD	E-II		L	T	P	J	C
C #2	GEZUI	anala u	-α - ÷	(Com	non to Al	1 Departn	nents)	anemarya	2	0	0	0	0
Course	Outcom	es	etrearta	essive p	10112 - 91 10	ed Chung	enentar	e I - againt	n Percu	otoi oite)	of a F	noizas	VIIO
At the e	nd of th	e course	e, the st	udent w	ill be ab	le to							
CO1:	Solve and w	the pro	blems in	n Perce	ntage, Constinuestions	onversio	n of Perc	entage to	o Ratio	and Ratio	o into l	Percer	ntag
CO2:	Elucio	late the	problen	ns in Pro	ofit and lo fillers an	oss and p	bercentag	e of prof	fit and 1	oss.	st 13p	L Los	tion nills
CO3:	Crack Volur Comp	the prone. brehend ctly.	blems in the give	nvolving en passag	g Geomo	etry, Are	ea, Perim	eter/Circ	cumfere	nce, Surf nd answe	ace are	ea and	ons
CO4:	Deduc the give	ce the p ven sent	roblems tences.	s involvi	ng Trigo	onometry	and exh	nibit goo	d exper	tise in de	etectin	g erro	ors i
C05:	Interp good	ret the vocabul	problem ary skill	ns on A by spot	ges & lo ting erro	ogarithm rs.	and wo	rk on lo	gical re	easoning	and de	emons	strat
Pre-requ	isite:							blems	re- Pro	lemisphe	1 510	- Spb	911
•	Basic Know	English ledge in	langua Basic l	ge and C Mathema	drammar atics	knowled	lge		iqraco g				
<u></u>	iest b				CO/PC	, PSO N	lapping				•		Tii
80.18	i fabrita	(3/2/1 i	ndicates	s the stre	ength of o	correlatio	on) 3-Stro	ong, 2-M	ledium,	1-Weak	1111	idioan	ang Pi
COs		Pr	ogramm	e Outco	mes (PC	s) and P	rogramm	e Specit	ic Oute	omes (PS	PO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	11	PC)12
CO1	3	3	3	2	1	1	1	3	3	3	2	3	
CO2	3	3	3	2	1	1	1	3	3	3	2	3	
CO3	3	3	3	2	1	1	1	3	3	3	2	3	dres ost
CO4	3	3	3	2	1	1	1	3	3	3	2	3	
CO5	3	3	3	2	1		ovi 1 min	3	3	3	2	3	
			2021.	C	ourse A	ssessme	nt metho	ods	cal Rea	a. "Log	K.Sin	idei/	
				Direc	et	1.0				Ir	direct	t	
CIE test	[(30) -]	Theory	12		Total C	CIE: 100	marks	÷.		-			

10991 CO 30311005 4702

and a " to hot with

Unit 01	4			DASIC APTI		6 Hours
Percento	Te. Conver	sion of a Percent	tage into a Fracti	on - Conversi	on of a Percen	tage into a Patio
Conversio	n of a Ratio	o into a Percentag	e - Percentage Cha	on = Conversional Succession	ve percentage -	- Problems
Conversio	n or a Rath	o mito a rerecinag	• I creentage Cha	inge Buccess	re percentage -	1100101115
Val 14	-44-1. T	unded a series of	P Deservet	of contrast of the		
Verbal A	ptitude: Ju	mbled sentences a	x Reconstructions	of sentences (I	QRS)	ad aving the second
Unit 02 Drofit L	Tupos	f prices Profit	Loss Dercents	age of Profit or	d Loss Com	6 Hours
Colling D	iss: Types (of prices – Floin	- LOSS - reference	and Loss Dro	hloma	non Gain of Loss –
Setting Pl	ice and Cos	st Price Equality -	- Successive Prom	and Loss – Pro	obienns	
			1.0.1.1	1.1		
Verbal A	ptitude: So	entence fillers two	o words & Idioms	and phrase	eq avrig out be	
Unit 03	un Amalaa	Complementem	and Sunnlamonton	v anglag Lin	Triangle	6 Hours
Bronortio	y: Aligies -	- Complementary	and Supplemental	y angles – Line	es – Thangle –	Types of triangles –
Aron Do	rimeter /	Circumference:	Friangles - Dector	ales and Sauce	res - Darallalos	ram Rhombus and
Tranazius	- Circler	_ Problems	mangies - Rectall	gies and squa		stant, Knombus and
Surface		d surface area	Volume Cuboid	- Cube - Rig	at circular cylin	der – Right circular
cone. Cr	here _ Here	u surrace area o		- Cube - Kigi	it encular cyllin	ider – Right elleular
cone – sp	nere – rielli	isplicie - i lobielli				
Verbal A	ntitudo: Re	ading comprehen	sion			
Verbal A	pillude. Re	eading comprehen		801121005	e in Gasic Mail	(III
Unit 04		0.00.1	Sector Stranger	0100	0' 0	6 Hours
Trigonon	netry: Valu	ie of Trigonomet	ry ratios for part	icular values –	Sign of Trigo	onometrical ratios –
Trigonom	etrical ratio	os for sum or diffe	rence of angles Pr	oblems		
POD	109 101					
Verbal A	ptitude: Sp	otting errors				1
Unit 05				1 1 1 1		6 Hours
Averages	- Problems	on ages – Logari	thm - Logical Rea	soning: Alpha	Series - Venn	diagram – Problems
3 2 2						
Verbal A	ptitude: W	riting captions for	given pictures.			
Theory:	30 Hrs	Tutorial: 0	Practical: 0	Project: 0	Total H	ours: 30 Hrs
TEYT D	OOKS	E E E E				COI 1 1
IEAID	JUKS					
1. S.Ch	and and Dr.	.R.S.Aggarwal, "(Quantitative Aptitu	ide for competi	tive examinatio	ns", S Chand and
Com	pany Limite	ed 2019.				
2. Nish	it K.Sinha,	"Logical Reasoni	ng and Data Interp	retation", Pears	son 2021.	
			CIANTIANI IDOUITS	20520 V6100-7		
				1971		t, 29'
				Total Ch	A A	12/200
			+	*	Q. 1	6/00
			End Examination	Semeside	Dr.S.	Anita
					Professo	or & Head
				the second the	Departmen	ANITA
					Professor	and Heed
					Department	t of Training,
					SALEAT	OF TECHNOLOGY,
					O G L P M	

Semester 2

Programme: B.E / B.. Tech

			6 5		PH	IYSIC	CS LAB	ORATO	DRY		L	Т	Р	J	C
U	23PH	[L21	0A	(C	ommoi	n to I M	Year B. IECH &	E/B.Te FT)	ch. CIV	IL,	0	0	2	0	1
Cour	se Oı	itcoi	nes						8		- 2 -				
At th	e end	l of t	he cour	rse, the	studen	t will	be able	to							
		Dat		the opti	ool the	rmala	and mag	netic pr	onerties	of mat	erials h	variou	s nhvsi	cs labo	ratory
CO	1:	Det	·	the opti	cai, inc	iiiiai c	inu magi	iene pr	operties	01 mai		y variou	5 physi	05 1000	lucory
2		equ	ipment.	,											
CO	2:	Acc	ess, pro	ocess an	d analy	se sci	entific in	format	on.						
СО	3:	Sol	ve prob	lems in	dividua	lly and	d collabo	oratively	/.					-	
Pre-r interf	equis erom	s ite: eter.	Capabl	le of u	sing So	crew g	gauge, V	/ernier	calliper	r, Trav	elling r	nicrosc	ope, ab	le to l	nandle
							CO/PO,	PSO M	lapping	5					
			(3/2	/1 indic	ates the	e stren	gth of co	orrelatio	n) 3-Sti	rong, 2-	Mediur	n, 1-We	ak		
COs		21]	Program	nme Ou	Itcom	es (POs)	and Pro	ogramm	ne Spec	ific Out	comes (PSOs)	DCO1	PCO
	PC)1	PO2	PO3	PO4	PO5	PO6	P07	PO8	P09	POIU	POII	POIZ	P501	P30
CO1	3	}	2		1		1			1					2
CO2	3	}	2		1		1			1					2
CO3	3	}	2		1		1			1					2
	1	•				Co	urse Ass	essmer	nt meth	ods					
	•					Dire	ct						Ind	irect	
CIE t	test I	(15)	•		•		RTPS (1	0)					1		
Ouiz	1 (5)						Record (10)				21			
Zuiz	1 (0)		•									0	course e	nd sur	vey
CIE 1	test II	(15))				Total CL	E:60 m	arks						
Quiz	2 (5)				8		Semester	r End E	xamina	tion (40) marks)			20 - #	с на ¹⁹ 19
LIST	r of	EXI	PERIM	ENTS	8						-				
1	Dete appa	ermin tratu	nation c s.	of the th	ickness	ofat	hin wire	by forn	ning inte	erferen	ce fringe	es using	air wee	lge	
2	Dete	ermin fero	nation of meter.	of veloc	ity of u	ltraso	nic wave	es and c	ompres	sibility	of the g	given li	quid us	ing ultr	asonic
3	Dete	ermiı	nation o	of Rigid	ity Moc	lulus o	of given	wire us	ing Tors	sion Per	ndulum.				
4	Dete	ermi	nation o	of coeffi	cient of	f visco	sity of li	quid by	Poiseu	ille's n	nethod.				
5	Dete	ermiı	nation o	of Youn	g's moo	lulus o	of the ma	aterial o	f the be	am by]	Non-uni	form be	ending 1	nethod	•
6	Dete	ermii	nation o	of the wa	aveleng	th of a	a diode la	aser.							

r.
IOURS

13/1/24. A.La

Dr. M.RENUGA, Professor & Head, Department of Humanities & Lar Sona College of Technology, SALEM - 6

Sult 12.1. 2024 '

Dr. C. SHANTHI, M.Sc., M.E., Ph.D., Professor of Physics Head, Department of Sciences Sona College of Technology (Autonomous) SALEM-636 005.

T

Programme: B.E / B. Tech Semester II

٦.

	and the second se				and the second second second		Second						
REFIS	134	BAS	ICS OI	FELEC	TRIC	AL EN	GINEE	RING	Ľ	T	P	J	C
DEELZ	IJA			LAI	BORAT	ORY			0	0	2	0	1
Outcon	nes												
end of th	ne cours	e, the st	udent v	vill be a	ble to								
Ap	ply basi	c circui	t laws f	for calc	ulating	electric	parame	ters of I	DC & A	C circu	uits.		
Det	termine chines.	and d	raw the	e mech	anical,	electric	cal and	perform	nance	characte	eristics	of ele	ctrical
Det	ermine	the value	ue of R	esistanc	e, Indu	ctance a	and Cap	acitance	eusing	various	bridge	s.	
1	(3/2,	/1 indic	ates the	e streng	th of co	PSO M orrelatio	apping	ong, 2-1	Mediun	1, 1-We	ak		
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
2	2	1	2	1	1	1	1	1	1	1	1	3	1
2	2	1	1	1	1	1	1	1	1	1	1	3	1
2	2	1	1	1	1	1	1	1	1	1	1	3	1
				Cou	rse Ass	essmen	t meth	ods			Ÿ.		
1200			E	Direct							Indir	ect	
t I (15) (5) t II (15) - (5)			RTI Rec Tot Sen	PS (10) ord (10 al CIE: nester E) 60 marl Ind Exa	ks minatic	on (40 r	narks)	-	Сог	irse enc	l surve	y
	BEEL2 Outcom and of th App Det mad Det PO1 2 2 2 t I (15) (5) t II (15) - (5)	BEEL213A Outcomes and of the cours Apply basic Determine machines. Determine ($3/2$, I PO1 PO2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	BEEL213A BASI Outcomes and of the course, the stand Apply basic circuit Determine and data machines. Determine the value (3/2/1 indice Program PO1 PO2 PO3 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 5 1 2 5 1 1 (15) (5) t II (15) (5) t II (15) (5)	BASICS OF BASICS OF Contromes and of the course, the student we Apply basic circuit laws for Determine and draw the machines. Determine the value of Ref (3/2/1 indicates the Programme Or PO1 PO2 PO3 PO4 2 2 1 2 2 2 1 2 2 2 1 1 2 2 1 1 2 2 5 1 1 2 2 5 1 5 E t I (15) RTI (5) RTI (5) RTI (5) RTI (5) RTI (5) RTI (5) Sen	BASICS OF ELECTIAN BASICS OF ELECTIAN Outcomes and of the course, the student will be a Apply basic circuit laws for calcuit Determine and draw the mech machines. Determine the value of Resistance (3/2/1 indicates the streng) Programme Outcomes PO1 PO2 PO3 PO4 PO5 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 Cou Direct I (10) (5) RTPS (10) Record (10 Direct	BASICS OF ELECTRIC, LABORAT Outcomes and of the course, the student will be able to Apply basic circuit laws for calculating of the course, the student will be able to Determine and draw the mechanical, machines. Determine the value of Resistance, Indu CO/PO, (3/2/1 indicates the strength of color Programme Outcomes (POS) PO1 PO2 PO3 PO4 PO5 PO6 2 2 1 1 1 Course Ass Direct ti (15) RTPS (10) (5) Semester End Exa	BASICS OF ELECTRICAL ENLABORATORY Outcomes and of the course, the student will be able to Apply basic circuit laws for calculating electric Determine and draw the mechanical, electric Determine and draw the mechanical, electric machines. Determine the value of Resistance, Inductance at the value of Resistance, Inductance at the value of Resistance, Inductance at the value of PO7 PO3 PO4 PO5 PO6 PO7 PO1 PO2 PO3 PO4 PO5 PO6 PO7 Direct Direl CiE: 60 marks	BASICS OF ELECTRICAL ENGINEE LABORATORY Outcomes cmd of the course, the student will be able to Apply basic circuit laws for calculating electric parame Determine and draw the mechanical, electrical and machines. Determine the value of Resistance, Inductance and Cap CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Str Programme Outcomes (POs) and Programm PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 2 2 1 1 1 1 1 1 Course Assessment method Direct Lange (10) Course Assessment method Direct Direct Direct Direct Direct (10) Total CIE: 60 marks Genester End Examination (40 m	BASICS OF ELECTRICAL ENGINEERING LABORATORY Outcomes cmd of the course, the student will be able to Apply basic circuit laws for calculating electric parameters of I Determine and draw the mechanical, electrical and perform machines. Determine the value of Resistance, Inductance and Capacitance CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-1 Programme Outcomes (POs) and Programme Specifier PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO9 2 2 1 <t< td=""><td>BASICS OF ELECTRICAL ENGINEERING LABORATORYIIOutcomesend of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & ADetermine and draw the mechanical, electrical and performance of machines.Determine the value of Resistance, Inductance and Capacitance usingCO/PO, PSO Mapping(3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium Programme Outcomes (POs) and Programme Specific OutcomesPO1PO2PO3PO4PO5PO6PO7PO8PO9PO10221111111111111111111111111111<tr <td="" colspan="2">1<</tr></td><td>BASICS OF ELECTRICAL ENGINEERING LABORATORYITIOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circu Determine and draw the mechanical, electrical and performance character machines.Determine the value of Resistance, Inductance and Capacitance using variousCO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-We Programme Outcomes (POs) and Programme Specific Outcomes (IPO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 P09 PO10 PO112Course Assessment methodsDirecttuil(15)RIPS (10) (5)Record (10)Course Assessment methodsCourse Assessment methodsCourse Assessment methods</td><td>BASICS OF ELECTRICAL ENGINEERING LABORATORYITPBASICS OF ELECTRICAL ENGINEERING LABORATORYITPOutcomesOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circuits.Determine and draw the mechanical, electrical and performance characteristics machines.Determine the value of Resistance, Inductance and Capacitance using various bridge: (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-Weak Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)PO1PO2PO3PO4PO5PO6PO7PO8PO9PO10PO11PO222111111CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-WeakProgramme Outcomes (POs)PO1PO2PO3PO4PO5PO8PO10PO11PO1221<tr< td=""><td>BASICS OF ELECTRICAL ENGINEERING LABORATORYITPJOutcomesOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circuits.Determine and draw the mechanical, electrical and performance characteristics of ele machines.CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-WeakProgramme Outcomes (POs) and Programme Specific Outcomes (PSOs)PO1PO2PO3PO4PO5PO6PO7PO8PO9PO10PO11PO12PSO12211111133Course Assessment methodsDirectIndirectt1 (15)RTPS (10) Record (10)Course end surver(5)Semester End Examination (40 marks)Course end surver</td></tr<></td></t<>	BASICS OF ELECTRICAL ENGINEERING LABORATORYIIOutcomesend of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & ADetermine and draw the mechanical, electrical and performance of machines.Determine the value of Resistance, Inductance and Capacitance usingCO/PO, PSO Mapping(3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium Programme Outcomes (POs) and Programme Specific OutcomesPO1PO2PO3PO4PO5PO6PO7PO8PO9PO10221111111111111111111111111111 <tr <td="" colspan="2">1<</tr>	BASICS OF ELECTRICAL ENGINEERING LABORATORYITIOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circu Determine and draw the mechanical, electrical and performance character machines.Determine the value of Resistance, Inductance and Capacitance using variousCO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-We Programme Outcomes (POs) and Programme Specific Outcomes (IPO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 P09 PO10 PO112Course Assessment methodsDirecttuil(15)RIPS (10) (5)Record (10)Course Assessment methodsCourse Assessment methodsCourse Assessment methods	BASICS OF ELECTRICAL ENGINEERING LABORATORYITPBASICS OF ELECTRICAL ENGINEERING LABORATORYITPOutcomesOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circuits.Determine and draw the mechanical, electrical and performance characteristics machines.Determine the value of Resistance, Inductance and Capacitance using various bridge: (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-Weak Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)PO1PO2PO3PO4PO5PO6PO7PO8PO9PO10PO11PO222111111CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-WeakProgramme Outcomes (POs)PO1PO2PO3PO4PO5PO8PO10PO11PO1221 <tr< td=""><td>BASICS OF ELECTRICAL ENGINEERING LABORATORYITPJOutcomesOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circuits.Determine and draw the mechanical, electrical and performance characteristics of ele machines.CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-WeakProgramme Outcomes (POs) and Programme Specific Outcomes (PSOs)PO1PO2PO3PO4PO5PO6PO7PO8PO9PO10PO11PO12PSO12211111133Course Assessment methodsDirectIndirectt1 (15)RTPS (10) Record (10)Course end surver(5)Semester End Examination (40 marks)Course end surver</td></tr<>	BASICS OF ELECTRICAL ENGINEERING LABORATORYITPJOutcomesOutcomesand of the course, the student will be able toApply basic circuit laws for calculating electric parameters of DC & AC circuits.Determine and draw the mechanical, electrical and performance characteristics of ele machines.CO/PO, PSO Mapping (3/2/1 indicates the strength of correlation) 3-Strong, 2-Medium, 1-WeakProgramme Outcomes (POs) and Programme Specific Outcomes (PSOs)PO1PO2PO3PO4PO5PO6PO7PO8PO9PO10PO11PO12PSO12211111133Course Assessment methodsDirectIndirectt1 (15)RTPS (10) Record (10)Course end surver(5)Semester End Examination (40 marks)Course end surver

List of Experiments

- 1. Verification of Ohm's law and Kirchhoff's laws
- 2. Measurement of power and power factor for series RLC circuit.
- 3. Open circuit and load characteristics of separately excited DC shunt Generator.
- 4. Load characteristics of DC shunt motor.
- 5. Load test on single phase transformer.
- 6. Load test on three phase Induction motor.
- 7. Measurement of DC resistance by Wheatstone bridge.
- 8. Measurement of inductance using Anderson bridge.
- 9. Measurement of capacitance using Schering bridge.
- 10. Measurement of earth pit resistance using Megger.
- 11. Demonstration of MCB and ELCB.

Theory:	Tutorial:	Practical: 30 Hrs	Project:	Total Hours: 30 Hrs
---------	-----------	-------------------	----------	---------------------

Dr.S.PADMA, M.E., Ph.D., Professor and Head, Sona College of Technology Salem-636 005. Tamil Nadu.

Semester II

1123	OL1201		French - II	L	Т	P	J	C
		•		1	0	0	0	1
Course (Outcomes		-		L			
At the er	nd of the cour	se, the student	will be able to					
CO1:	Accept and	refuse of an inv	vitation, give some instruction of do's	s and do	n'ts, co	onverse	in	
COL	Describe	centres, write a	in invitation					
CO2:	Talk about	things around w	tee in a city, ask further details, desci	ribe one	's home	etown		
	express obl	igation and proh	ibition, sell an object in online	oards, ex	press a	gree an	d disag	ree,
CO4:	about weath	one's goals, exp ner, draft a mail	ress one's feelings, write a list of thi response	ngs to d	o, expr	ess an c	pinion	, tall
CO5:	Express on others, write	e's interest and e to ask for a hel	d wish, describe a pet animal, exp p, narrate a past event, write a biogr	press or aphy	ne's av	ersions	enco	urage
			Course Assessment methods					
		Dir	rect			Indirec	4	
CIE test I	(30)		Total CIE: 100 marks		ing Palagan A			<u>in a sui</u>
CIE test I	I (30)		Semester End Examination: NIL	ŀ	Cour	se end s	urvev	
CIE test I	II (40)						, ai vey	
J nit 01:	2					3	Hours	
Hr 4: Imp <u>Hr 6: Qua</u> I nit 02:	erative senter ntitative artic	ice, food and be les, quantities, p	verages, utensils, cutleries, corckerie pronoun 'en', express appreciation, w	es vrite an i	nvitatio	on		
Hr 8. City	and localitie	Conjugation:	prendre adjectives of place pronou	· ·	l	3	Hours	
Hr 10: Tra Hr 12: As	ansport, leisur king informat	e activities, prep ion about a new	position of place, degrees of compari	ison				
Jnit 03:		1	1			3	Hours	
Hr 14: Th	ings in a store	, conjugation : f	aire, imparfait 2, passé composé				110415	
Hr 16: Th Hr 18: Im	ings in a repar perative negat	iring shop, comp tive, express obl	outer, relative pronouns: que and qui igation and interdiction, online sale a	and resp	onse			
nit 04:				A		3	Hours	
Hr 20: Pro	ofessions, con	jugation: croire,	voir, recent past tense	an is the analysis states				
Hr 22: Tra	iveling formation	lities, expressing	g about health condition, future tense	;				
nit 05.	onoun COD, ta	alk about weathe	er condition, write about one's plans	and pro	jection	S		
Hr 26. Cit	izenship and	olidarity conju	action: connectes and encode the	1		3]	Hours	
Hr 28: Im	parfait vs pass	é composé, nati	re and environment indirect proposition	vs penda	ant			
Hr 30: An	imals, conditi	onal, talk on sup	porting others, write a biography					
Theor	y: 15 Hrs	Tutorial:	Practical: Project:	1	Total	Hours:	15 Hrs	
TEXT BO	OKS		· · · · · · · · · · · · · · · · · · ·					
1. The	e course facul	ty will provide r	elevant audios, videos, handouts and	l notes.		1		-
2. Boo	oks : Saison (1	Méthode de fran	çais, cachier d'activités)					
3. Rel	erence books	: La conjugaiso	n, Dondon, Echo					
						A.	had	5 1

Dr. M. RENUGA, Professor & Head, Department of Humanities & Languages, BE / B. Tech Regulations (223)

U23OL1202			German - II		L	Т	P	J	C	
			3		1	0	0	0	1	
Course (Dutcomes			4 	2		L	I		
At the er	nd of the cours	e, the student wi	ll be able to							
CO1:	Use gramma	tical expressions	appropriately in day	y-to-day conver	sation.	2			5.	
CO2:	Make them f	frame simple sent	ences /questions.							
CO3:	Accentuate t	o start and sustain	n basic conversation	l						
CO4:	Helps them a	articulate thought	s in German							
CO5:	Identify the o	different forms of	the verb							
	1	C	ourse Assessment	methods	······					
		Direc	e				Indirec	t		
CIE test I	(30)		Total CIE: 100 mar	rks						
CIE test I	I (30) II (40)		Semester End Exa	mination: NIL		Cours	se end s	urvey		
nit 01:	(40)						2	Uarra		
Nominati	ve/accusative c	ase, adjectives					3.	nours		
nit 02:		•			-					
	transportation.	, orientation, givin	ng/understanding sin	mple directions			3]	Hours		
viodes of	1 ,			1						
	1									
nit 03:	and and haverage	rag Madal works	G11 1		<u>.</u>		31	Hours		
nit 03: • Fo	od and beverag	ges, Modal verbs,	Separable verbs				31	Hours		
nit 03: • Fo nit 04:	od and beverag	ges, Modal verbs,	Separable verbs			[-	31	Hours		
nit 03: • Fo nit 04: • Sin	nod and beverage	ges, Modal verbs, using modal / se	Separable verbs	- - -			31	Hours		
nit 03: • Fo nit 04: • Sin nit 05:	od and beverage	ges, Modal verbs, using modal / se	Separable verbs	-			31	Hours		
nit 03: • Fo nit 04: • Sin nit 05: • Ar	nod and beverage mple sentences ticles of clothin	ges, Modal verbs, using modal / sej ng	Separable verbs		· ·		3 I 3 I 3 I	Hours		
nit 03: • Fo nit 04: • Sin nit 05: • Ar Theor	nod and beverage mple sentences ticles of clothin y: 15 Hrs	ges, Modal verbs, using modal / se ng Tutorial:	Separable verbs parable verbs Practical:	Project:	· · · · · · · · · · · · · · · · · · ·	Total	3 1 3 1 3 1 Hours:	Hours Hours Hours		
nit 03: • Fo nit 04: • Sin nit 05: • Ar Theor TEXT BO	nod and beverage mple sentences ticles of clothin y: 15 Hrs OKS	ges, Modal verbs, using modal / sej ng Tutorial:	Separable verbs parable verbs Practical:	Project:		Total	3 1 3 1 3 1 Hours: 1	Hours Hours Hours 15 Hrs		
nit 03: • Fo nit 04: • Sin nit 05: • Ar Theor TEXT BO 1. Net	nod and beverage mple sentences ticles of clothin y: 15 Hrs OKS tzwerk A1	ges, Modal verbs, using modal / se ng Tutorial:	Separable verbs parable verbs Practical:	Project:		Total	3 1 3 1 3 1 Hours: 1	Hours Hours Hours		
nit 03: • Fo nit 04: • Sin nit 05: • Ar Theor 'EXT BO 1. Net	nod and beverage mple sentences ticles of clothin y: 15 Hrs OKS tzwerk A1	ges, Modal verbs, using modal / sej ng Tutorial:	Separable verbs parable verbs Practical:	Project:		Total	3 3 3 Hours: 1	Hours Hours Hours	,	

Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 636 :

U230	L1203		Jananese - II		L	Т	P	J	C
		4 	Sapanese - 11		1	0	0	0	1
Course Ou	tcomes					L	J		I
At the end	of the cours	se, the student will	ll be able to						
CO1:	Use verbs in	polite conversation	on or for dissuasion	and describe tw	o diff	erent ac	ctivities		
CO2:	Demonstrate	e the application of	f causative verbs an	nd those that exp	ress al	bility of	r possib	ility a	nd
	describe exp	periences	U DUINE MOUT	F			pobblo	,, u	
CO3:	Use plain-st	yle expressions, th	ose that state opini	ons, and verbs an	nd adj	ectives	that go	with n	oun
CO4:	Express sen received	tences that use 'w	when' and 'if' and	those that descr	ibe ho	ow serv	vices are	e giver	n an
CO5:	Read 126 le and II to pas	tters of Kanji, and s the Japanese Lar	l demonstrate adeq nguage Proficiency	uate knowledge Test (JLPT) for	of the the N	e lesson 5 Level	s learnt	in Lev	vels
-		Co	ourse Assessment	methods					
		Direct					Indirec	t	
CIE test I (3	0)		Total CIE: 100 ma	rke					
CIE test II (30)		Somester End Eve	mination NII		Cour	so ond o	11217017	
CIE test III	(40)		Semester Enu Exa	mination: NIL		Cour	se enu s	urvey	
nit 01:							2	TT	
Ir 1_2. Wo	rds and verb	s everessing reque	ets / Kanii 1 10				3	nours	
Hr 3-4: Ask Hr 5-6: Des	ing for perm	ission; making sta	tements to prohibi	t something / Ka	nji 11	-20	2. 		
nit 02:	unonig two	activities / ixaliji 2	1-50	- -			2	Uoure	
Ir 7-8: Ve	rbs that exp	ress 'I have to '	Kanii 31-40			1	5	liouis	
Ir 9-10: V	erbs which e	express ability or p	ossibility / Kanji 4	1-50					
Hr 11-12: D	escribing ex	perience / Kanji 5	1-60						
nit 03:	- -		2				3	Hours	
Hr 13-14: P	lain-style ex	pressions / Kanji 6	51-70						
Hr 15-16: E	xpressions 1	ike 'I think that	' / Kanji 71-80						
<u>-Ir 17-18: Q</u>	ualifying no	ouns with verbs and	d adjectives / Kanji	81-90					
nit 04:							3	Hours	
Hr 19-20: E	xpressions u	ising 'When' /	Kanji 91-100						
Ir 21-22: D	escribing th	e giving and receiv	ving of services / K	anji 101-110					
11 23-24: E	xpressions u	sing if / Kan	yı 111-126				5 s.		
In 25 26, D		II DT NIS	5 	· · · · · · · · · · · · · · · · · · ·			3	Hours	
11 23-20. Fi $4r 27_28. Di$	reparing for	JLPT N5		х ^с к ^с					
Ir 29-30: Pi	reparing for	JLPT N5							
Theory	15 Hrs	Tutorial:	Practical:	Project		Total	Hours	15 Hr	
FXT BOO	KS				<u></u>		110410.	10 111	
1. The c	course facult	y will provide han	douts / notes / cour	se material.		j.			
2. Book	s on Basic J	apanese language	available in the col	lege library.					
	с) К			i			h.	had	Eliz
								1 13	14-

13.2.2024 Version I.0

Programme: B.E / B.Tech

Professor & Head, Department of Humanities & Languages, Sona College of Technology, B.E / B. Tech Regulations 2636 005.

U23	OL1204		Korean - II		L	T	Р	J	C
Course	2				1	0	0	0	1
Course (Jutcomes								
CO1.	Identify tim	se, the student w	ill be able to	× 13					
<u> </u>	Identify the	date and days of	the week						
CO3.	Explain loc	ation and places	uie week		2				
CO4:	Explain des	tination							
CO5:	Construct s	imple sentences /	uestions						
		(Ourse Assessment	methods	- 18-8-1				
		Dim	-+	memous	1				
CIE test I	(30)	DITE	Total CIE: 100	-1			Indirec	t	
CIE test I	T (30)		Total CIE: 100 ma	rks		C	1		
CIE test I	II (40)		Semester End Exa	mination: NIL		Cours	se end s	survey	
Jnit 01: 7	Time	·		3		1	2		
Talking a	bout time						3	Hours	
Init 02. I	Date					<u>.</u>			
	Jaco			-		-	3	Hours	
Talking a Talking a	bout dates and bout doing so	d days of the week mething in the pas	st						
Unit 03:	Location			1			3	Hours	ŝ
Talking a Talking a	bout location bout doing som	mething at a locat	on			v 2,			
Init 04:	Direction		-	-			3	Hours	
Talking a	bout direction	S							
Init 05: F	uture						3]	Hours	
Talking a	bout doing son	nething in the fut	ure			l			
Talking al	bout plans for	the future							
	bout nope for	ine tuture							
Theo	ry: 15 Hrs	Tutorial:	Practical:	Project:		Total I	Hours:	15 Hrs	
REFERENC	ES Kanal								
1 V	itamin Korear	1 - 1						h	

mp- 2 m = 2/24.

HOD

Dr. M.RENUGA, Professor & Head, Department of Humanities & Languages, Sona College of Technology, SALEM - 635 000.

B.E / B.. Tech Regulations 2023