Section : CIVI	L Date: 04-01-2021	Page No: 01 of 02 Approved By: HO	
Revision No : 00	Prepared By : K.BASAVARAJU		
Tools: Black bo	ard		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-1: SEQU	ENCES, SERIES AND MEAN VALUE THEOR	EMS	
	an value theorems to real life problems		
ΓB:" Engineeri	ng Mathematics", Dr. T.K.V.Iyengar; S.Chand p	ublications	
1	SEQUENCES AND SERIES:		
	Convergence and Divergence		
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series	·	intersperse
7	Leibnitz 's rule	To:	with
8	Mean Value Theorems:	23-01-2021	discussion
	Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem	Section 1	
11	Taylor 's and Maclaurin 's theorems with		
11 UNIT-II DIF	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND		GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu	ing fields	GREE
UNIT-II DIF	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
UNIT-II DIFCO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields blications	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	GREE Lecture
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Bernouli Equation	ing fields blications From:	Lecture intersperse
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture intersperse
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20 21	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar Newton's law of cooling	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture intersperse with

UNIT-III: LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER

CO3: Solve the differential equations related to various engineering fields

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.C	Chand publications
---	--------------------

24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	_ &	with
29	Q(x) = xV(x)	From:	discussions,
30	$Q(x) = x^n \sin ax \ or \ \cos ax$	22-02-2021	
31	Method of variation of parameters	To:.	
32	Applications: LCR Circuit	06-03-2021	

UNIT-IVPARTIAL DIFFERENTIATION

CO4: Familirize with functions of several variables which is useful in optimization

TB: "Engineering Mathematics", Dr. T.K.V. Iyengar; S. Chand publications

33	Homogeneous function; Euler's Theorem		
34	Total Derivative; Chain rule	From:	
35	Taylor's mean value theorems	08-03-2021	Lecture
36	Maclaurin's series		interspersed
37	Jacobians, formulae	To:	with
38	Functional dependence	27-03-2021	discussions
39	Maxima minima of two variables	4167	
40	Langranges method		

UNIT-V: MULTIPLE INTEGRALS

CO5:Apply double integration techniques in evaluating areas bounded by region TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

41	Introduction	From:	
42 .	Double integrals	29-03-2021	
43	Triple integrals	To:17-03-	Lecture interspersed
44	Change of order of integration	2021	with
45	Change of variable		discussions
46	Applications: Finding areas		
47	Finding volumes		

K.BaseverResy Signature of Faculty Mulley

Signature of HOD

	COMMUNICATIVE ENGLISH		
Section : CE	Date: 08-01-2021		o: 01 of 03
Revision No : 0		Approv	ed By: HOD
Tools: Black be		D-4-	M. J C
No. of Periods	TOPIC	Date	Mode of Delivery
IINIT 1: A Dre	nwer full of happiness, Deliverance by Premcha	and	Denvery
	e effective listening skills for better comprehens		lectures and
	by native speakers		
	English, Maruthi Publications, —The Individual So	ciety , Pearson P	ublications
1	A Drawer full of happiness	08-01-21	
2	Listening : Short Audio Texts	08-01-21	
3 .	Speaking: Asking and answering questions	. 08-01-21	_
4	Reading: Skimming and Scanning	19-01-21	Lecture interspersed
5	Reading for Writing: Paragraph writing	19-01-21	with discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	· Long Answers	25-01-21	
10	Short Answers	27-01-21	
CO2: Focus on and authentic TB: Infotech Eng	glish, Maruthi Publications, —The Individual Socie	sion of various a	academic text
12	Nehru's letter to his daughter Indira on her birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15 62	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16	Reading for Writing: Summarizing	03-02-21	with
17	Vocabulary: Technical vocabulary	04-02-21	
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Societyl, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture interspersed
26	Speaking: Discussing specific topics in pairs	16-02-21	with discussions
27	Reading: Reading a text in detail	17-02-21	discussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	- 100
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

entropy of the control of the contro	English		discussions
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

TB: Infotech	English, Maruthi Publications, —The Individual Society	yll, Pearson Pub	lications
41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture interspersed with
43	Speaking: Formal oral presentations	05-04-21	discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	

Signature of Faculty

Signature of HOD

	e: Engineering Physics			Do == NI	•00
Section :C		ate:08.01.2021	C. WOTHER	Page No	
Revision No):00 P	repared By:B.NA	GA JYOTHIRMAI	Approve	d By: HOD
Tools: No. of	TOPIO		DATE		Mode of
Periods	1011	C	DITTE		Delivery
UNIT-I	WAVE OPTICS				
					Lecture
	CEO1: To identify the				interspersed
	interference, diffracti	on and polarization	n related to its Engir	eering	with
	applications.				discussion
1	INTERFERENCE:I	ntroduction	From:		
2	Principle of Superpos		08/01/202	1	
3	Coherent Sources-Ty	pes			
4	Interference- Types	,,,			
5	Interference in Thin F		To:		
6	Colours in Thin Film				-
7	Newton's Rings		30/01/202	1	
8	Applications of Interf	erence			
9	Problems				
10	Diffraction: Introduc	ction			
11	Fresnel and				
- 11	Fraunhoffer Diffraction	on			Lecture
12	Fraunhoffer diffraction				intersperse with
13	Fraunhoffer diffraction				discussion
14	Fraunhoffer diffraction				
15	Fraunhoffer diffraction				
16	Grating Equation	on de 14 onto			
17	Dispersive Power of	Grating			
18	Resolving Power of C				
19	Problems	5			
20	Polarization :Intro	oduction			
21	Types of Polarization				
22	Polarization by Reflec				
23	Polarization by Duob				Lecture
24	Nicol Prism				intersperse
25	Quarter Wave & Hali	f Wave Plates			with discussion
26	Problems				discussion
UNIT-II	LASERS AND FIBI	ER OPTICS			
		CEO2:Understand the mechanism of stimulated emission of light,			
	utilization of lasers as				
	applications, study of			bers and	
	their implications in		ations.		Lecture intersperse
27.	Lasers: Introduction				with
28	Characteristics of Las		From:		discussion
29	Spontaneous and Stir				
30	Einstein's Coefficien		01 03 300	11	
31.	Population Inversion,	Lasing action	01-02-202	41	

32	Pumping Mechanism-Pumping		
33	method	T	
	Ruby Laser	To:	
34	Helium Neon Laser	13-02-2021	
35	Applications of Lasers	13-02-2021	
36	Fiber Optics: Introduction		
37	Principle of Optical Fiber		
38	Acceptance angle		
39	Numerical Aperture		
40	Classifications optical fibers based on		
	refractive index profile and modes		
41	Propagation of electromagnetic wave		
	through optical fibers.		
42	Applications, Problems		
UNIT-III	ENGINEERING MATERIALS		
	CEO3:To explain the significant cond materials that leads to potential application		Lecture interspersed with
43	Dielectric Materials: Introduction,		discussions
44	Dielectric polarization		
45	Types of polarizations- Electronic		
	polarization		
46	Ionic polarisation, Orientation		
	polarizations		
47	Lorentz internal field		
48	Clausius-Mossotti equation		
49	Piezoelectricity, Problems	From:	
50	Magnetic Materials: Introduction	22-02-2021	Lecture
51	Magnetic dipole moment,	To 10-03-2021	interspersed
	Magnetization, Magnetic	10-03-2021	with
	susceptibility and permeability		discussions
52	Origin of permanent magnetic		
	moment		
53	Classification of magnetic		
	materials:Dia,Para,Ferro		
54	COMM: Antiferro and Ferri		
	magnetic materials		
55	Domain concept for Ferromagnetism,		
	Domainwalls		
56	Hysteresis ,soft and hard magnetic		
	materials		
57			
57 UNIT-IV	materials Eddy currents and Applications ACOUSTICS AND ULTRASONICS		
	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give echo and gives requirements of acoust	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of	
UNIT-IV	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give ,echo and gives requirements of acoust Acoustics is useful in civil Engineering	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of	
UNIT-IV	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give echo and gives requirements of acoust Acoustics is useful in civil Engineering Acoustics: Introduction,	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of	200
UNIT-IV	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give echo and gives requirements of acoust Acoustics is useful in civil Engineering Acoustics: Introduction, Requirements of acoustically good	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of g.	
58 59	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give echo and gives requirements of acoust Acoustics is useful in civil Engineering Acoustics: Introduction, Requirements of acoustically good hall	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of g.	250:
UNIT-IV	Eddy currents and Applications ACOUSTICS AND ULTRASONICS CEO4:To study ultrasonics production applications in various mechanical fiel acoustics mainly Sabine's formula give echo and gives requirements of acoust Acoustics is useful in civil Engineering Acoustics: Introduction, Requirements of acoustically good	ds of engineering. Also, study of es awareness about reverberation ically good hall. This study of g.	Lecture

ime' ing

	Absorption coefficient first part	12-03-2021	with
62	Sabine's formula (Derivation using		discussion
	growth and decay method) -	To	
	Absorption coefficient second part		
63	Sabine's formula (Derivation using	25-03-2021	
	growth and decay method) -		
	Absorption coefficient Review	The number of Compaint of the	
64	Absorption coefficient and its		
	determination		
65	Factors affecting acoustics of		
	buildings and their remedial		
	measures.		
66	Ultrasonics: Introduction, Properties		
67	Production by magnetostriction and		
	piezoelectric methods, Detection		
68	Acoustic grating		Lecture
69	Non Destructive Testing – pulse echo		intersperse
	system through transmission mode.		with
	o, stell through transmission mode.		discussion
70	Non Destructive Testing – pulse echo		
	system through reflection modes,		
	Applications	and the second second	
JNIT-IV	CEO5:To Understand crystallography a know the crystal systems and for the dete	and X-ray diffraction used to	
	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's	and X-ray diffraction used to ermination of crystal tion number.Also,Bragg's law	
71	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina	and X-ray diffraction used to ermination of crystal tion number.Also,Bragg's law	
71	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell	and X-ray diffraction used to ermination of crystal tion number. Also, Bragg's law angle in crystal structure.	
	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice	and X-ray diffraction used to ermination of crystal tion number.Also,Bragg's law	Lecture
71	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From	and the state of t
71 72	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D)	and X-ray diffraction used to ermination of crystal tion number. Also, Bragg's law angle in crystal structure.	intersperse with
71	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From	interspers with
71 72 73	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From	intersperse with
71 72	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with
71 72 73 74	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC Packing fraction of BCC& FCC	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with
71 72 73	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	interspers with
71 72 73 74 75	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices — separation between successive (hkl) planes.	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with
71 72 73 74	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with
71 72 73 74 75	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X- ray diffraction: Bragg's law	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with discussion
71 72 73 74 75	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordinagives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices — separation between successive (hkl) planes.	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with discussion
71 72 73 74 75 76	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X-ray diffraction: Bragg's law X-ray Diffractometer	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	Lecture intersperse with
71 72 73 74 75	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X-ray diffraction: Bragg's law X-ray Diffractometer Crystal structure determination by	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	Lecture intersperse with
71 72 73 74 75 76	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X-ray diffraction: Bragg's law X-ray Diffractometer	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	Lecture intersperse with
71 72 73 74 75 76 77 78	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's a Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X-ray diffraction: Bragg's law X-ray Diffractometer Crystal structure determination by Laue's	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	Lecture intersperse with
71 72 73 74 75 76	CEO5:To Understand crystallography a know the crystal systems and for the detestructures, Packing fraction and Coordina gives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X-ray diffraction: Bragg's law X-ray Diffractometer Crystal structure determination by	and X-ray diffraction used to ermination of crystal ation number. Also, Bragg's law angle in crystal structure. From 26-03-2021	intersperse with discussion Lecture intersperse

Signature of Raculty

SRK Institute of Technology

d decayin Signature of HOD

TENTATIVE LESSON PLAN: R201104 ENGINEERING DRAWING

Course Title: E	NGINEERING DRAWING	Course Code: 1	R201104
Section : Sec I			: 01 of 02
Revision No: 0	Prepared By: R. KIRAN KUMAR	Approve	d By : HOD
Fools: Black bo	oard, PPTs		
S.NO	TOPIC	Date	Mode of
			Delivery
UNIT-I IN	TRODUCTION TO DRAWING		
	aw the polygons, curves, scales		
TB:"Engineerin	ng Drawing", by N.D. Butt &V.M. Pancha	l, Chariot Publis	shing House
Anand. 49 th Ed	ition – 2006.		
1	Introduction		
2	Lettering and Dimensioning		
3	Geometrical constructions, Polygons	From:	
4	Ellipse	11/01/2021	Lecture
5	Parabola and Hyperbola	angan Angana	interspersed
. 6	Cycloids	. To:	with
7	Involutes	30/01/2021	discussions
8	Vernier scales		
9	Plain scales, diagonal scale		400000
UNIT-IIPROJ	ECTIONS OF STRAIGHT LINES		
TB:"Engineeri Publishers, 2 nd 10	ng Drawing", by Agarwal & Agarwal, Ta Edition – 2015. Projections of points in various quadrants		Lecture intersperse with
11	Projections of lines, lines parallel either of the	From:	discussion
Market and Control	reference planes and inclined to both planes	01/02/2021	and address
12	True length determination and true angle of	To:	
	inclination	06/02/2021	
13	Traces (inclined to both planes)	00/02/2021	
UNIT-IIIPRO	JECTIONS OF PLANES		
	dentify the different plans and draw the pr	ojections of the p	lane incline
to both the pla	nes.		
TB:"Engineer	ing Drawing", by Agarwal & Agarwal, Tata	a McGraw Hill P	ublishers, 21
Edition - 2015			
14	Projection of plane (parallel to one plane and	d From:	
	perpendicular to other plane)	08/02/2021	Lecture
15	Projection of plane (parallel to one plane an	d 08/02/2021	intersperse
	inclined to other plane)	To:	with
16	Projection of plane (inclined to both plane)	13/03/2021	discussion
17	Projection of plane (inclined to both plane)	15/05/2021	
UNIT-IV	PROJECTIONS OF SOLIDS		
CO4: Able to i	dentify the basic solids and draw the proje	ctions of the soli	ds inclined t
one of the plan	ies.		
	ing Drawing", by Agarwal & Agarwal, Tata	McGraw Hill Pu	ıblishers, 2 ⁿ
Edition - 2015			

18	Projection of solids (Prisms, Cylinder)	From:	Lecture
19	Projection of solids (Prisms, Cylinder)	15/03/2021	interspersed
20	Projection of solids (Pyramids, cone)	To:	with
21	Projection of solids (Pyramids, cone)	03/04/2021	discussions

UNIT-V ISOMETRIC PROJECTIONS

CO5:Able to represent and convert the isometric view to orthographic view and orthographic view to isometric view.

TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2nd **Edition – 2015.**

22	Conversion of isometric views to orthographic views	F	
23	Conversion of isometric views to orthographic views	From: 10/04/2021	Lecture interspersed
24	Conversion of orthographic views to isometric views	To: 24/04/2021	with discussions
25	Computer Aided Design, Drawing practice using Auto CAD	24/04/2021	3

Signature of Faculty

Signature of HOD

Course Title: ENGINEERING GEOLOGY	
Section : Sec A Date : 8-1-2021	Page No: 01 of 03
Section : Set A Date : 0-1-2021	Approved By : HOD
Revision No: 00 Prepared By: Dr.T. Satyanaryana	

Tools: Black board, PPTs			1 37 3 6
No. of	TOPIC	Date	Mode of Delivery
Periods			

UNIT - Introduction:

CO1 The student will be able to understand the basic concepts of Identify and classify the geological minerals

T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publications,

T2. Engineering Geology, Subinoy Gangopadhay, Oxford University press

1	Introduction	8-1-21
1	Definition of geology and various Branches of	11-1-21
2		
	Geology	12-1-21
. 3	Allied Branches of geology	
4	Importance of Geology in Civil Engineering with	20-1-21
	case studies	22-1-21
5	Weathering	
6	Weathering of rocks- physical weathering	23-1-21
7	Weathering of rocks- chemical weathering	25-1-21
8	Geological agents	27-1-21
9	River process-erosion	28-1-21
10	River process-Transportation	29-1-21
	d of Dools and their development	1-2-21
11	weathering process of Rock and their development	
12	River valley development	2-2-21

UNIT -II Mineralogy And Petrology

CO2 The student will be able to understand the basic concepts Measure the rock strengths of various rocks. Classify and measure the earthquake prone areas to practice the hazard zonation

T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publications, T2. Engineering Geology, Subinoy Gangopadhay, Oxford University press

13	Mineralogy And Petrology	3-2-21
14	Definitions of mineral	4-2-21
15	Structures of silicates and rock,	6-2-21
16	Different methods of study of mineral and rock,	8-2-21
17	The study of physical properties of minerals and rocks for megascopic study for the following minerals and rocks,	9-2-21
18	Common rock forming minerals are Feldspar	10-2-21
19	Quartz Group, Olivine, Augite,	11-2-21
20	Hornblende, Mica Group, Asbestos,	12-2-21
21	Talc, Chlorite, Kyanite,	13-2-21
22	Garnet, Calcite, other ore forming minerals are Pyrite, Hematite	15-2-21
23	Magnetite, Chlorite, Galena,	16-2-21
24	Pyrolusite, Graphite, Chromite, Magnetite And Bauxite. Classification,	17-2-21

Lecture interspersed with discussion

25	structures Pyrolusite, Graphite, Chromite,	18-2-21
		20-2-21
26	Magnetite And Bauxite	22-2-21
27	Classification, structures textures and forms of	12222
	Igneous rocks	100 001
28	Metamorphic rocks, and their megascopic study of	23-2-21
20	granite varieties, (pink, gray, green).	
20	Pegmatite	24-2-21
29		25-2-21
30	,Dolerite, Basalt etc.,	26-2-21
31	Shale, Sand Stone, Lime Stone,	
32	Laterite, Quartzite, Gneiss,	27-2-21
		1-3-21
33	Schist, Marble, Khondalite	0.2.21
34	and Slate and their importance in Civil Engineering	2-3-21

UNIT-III Structural Geology:-

CO3 The student will be able to understand the basic Classify, monitor and measure the Landslides and subsidence .Prepares, analyses and interpret the Engineering Geologic maps

T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publications,

T2. Engineering Geology, Subinoy Gangopadhay, Oxford University press

35	Strike, Dip and Outcrop study of common geological	3-3-21
33	structures	
36	associating with the rocks such as Folds	4-3-21
37	Faults	6-3-21
38	Joints	8-3-21
39	Unconformities- parts	9-3-21
40	types mechanism	10-3-21
41	their importance in Civil Engineering	12-3-21

UNIT IV Ground Water, Earth quakes ,Landslides, Geophysics:-

CO4 The student will be able to understand the basic Analyses the ground conditions through geophysical surveys, the Test the geological material and ground to check the suitability of civil engineering project construction

T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publications,

T2. Engineering Geology, Subinoy Gangopadhay, Oxford University press

42	Water table, Cone of depression	13-3-21	
43	Geological controls of Ground Water Movement	22-3-21	
44	Ground Water Exploration Techniques	23-3-21	Lecture
45	Earthquakes And Land Slides: Terminology	24-3-21	interspersed with
46	Classification, causes and effects	25-3-21	discussions
47	Shield areas and Seismic bells, Richter scale intensity,.	27-3-21	
48	Precautions of building constructions in seismic areas	30-3-21	
49	Classification of Landslides, Causes and Effects,	31-3-21	
50	measures to be taken prevent their occurrence at Landslides Case studies	1-4-21	
51	Importance of Geophysical methods,	2-4-21	
52	Classification, Principles of Geophysical study by Gravity method	3-4-21	
53	Magnetic method, Electrical methods	5-4-21	_

54	Seismic methods,	6-4-21	
55	Radiometric method and Electrical resistivity,	8-4-21	
56	Seismic refraction methods	9-4-21	
57	Engineering properties of rocks	10-4-21	
CO6 The s	Geology of Dams, Reservoirs And Tunne tudent will be able to understand Investigate the	project site for	
mega/mini ci	vil engineering projects. Site selection for mega eng	ineering projects	
like Dams, Tu	nnels, disposal sites etc		
	and the second s		

T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publication	s,
--	----

T2. Engineer	ring Geology, Subinoy Gangopadhay, Oxford Universi	ty press	
58	Types and purpose of Dams,	12-4-21	
59	Geological considerations in the selection of a Dam site	15-4-21	
60	Life of Reservoirs Purpose of Tunnelling,	16-4-21	
61	effects, Lining of Tunnels	17-4-21&19- 4-21	
62	. Influence of Geology for successful Tunnelling	20-4-21&22- 4-21	
63	Pervious question paper discuss	23-4-21	

Signature of the HOD

Section : EEE	Date: 04-01-2021	Page No	: 01 of 02
Revision No : 00			ed By: HOD
Tools: Black bo	ard		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-1: SEQU	ENCES, SERIES AND MEAN VALUE THEORI	EMS	
CO1:utilize me	an value theorems to real life problems		
TB:" Engineeri	ng Mathematics", Dr. T.K.V.Iyengar; S.Chand pu	blications	
1	SEQUENCES AND SERIES:		
	Convergence and Divergence		
2	Ratio test		
3	Comparison test	_	
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6 '	Alternating series	T	intersperse
7	Leibnitz 's rule	To:	with discussions
8	Mean Value Theorems:	23-01-2021	
	Rolle 's Theorem		
	Lagrange 's mean value theorem		
9			
10	Cauchy 's mean value theorem		
10 11 UNIT-II DIF	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI		GREE
10 11 UNIT-II DIF CO2: Solve the	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand pu	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree	ing fields blications	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields blications From:	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	
UNIT-II DIF CO2: Solve the B:" Engineerin	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineers g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	From: 25-01-2021	Lecture
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	Lecture
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation	From: 25-01-2021	Lecture interspersed with
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineers g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture interspersed with
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Contemporary of the production of the productio	From: 25-01-2021	Lecture intersperse with

UNIT-III: LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER

CO3: Solve the differential equations related to various engineering fields

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From:	discussions
30	$Q(x) = x^n \sin ax \ or \ \cos ax$	22-02-2021	
31	Method of variation of parameters	To:	
32	Applications: LCR Circuit	06-03-2021	

UNIT-IVPARTIAL DIFFERENTIATION

CO4: Familirize with functions of several variables which is useful in optimization

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

Homogeneous function; Euler's Theorem		
Total Derivative; Chain rule	From:	Lecture interspersed with
Taylor's mean value theorems	08-03-2021	
Maclaurin's series		
Jacobians, formulae	To:	
Functional dependence	27-03-2021	discussions
Maxima minima of two variables		
Langranges method		
	Total Derivative; Chain rule Taylor's mean value theorems Maclaurin's series Jacobians, formulae Functional dependence Maxima minima of two variables	Total Derivative; Chain rule Taylor's mean value theorems Maclaurin's series Jacobians, formulae Functional dependence Maxima minima of two variables From: 08-03-2021 To: 27-03-2021

UNIT-V: MULTIPLE INTEGRALS

CO5: Apply double integration techniques in evaluating areas bounded by region TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

41	Introduction	From:	
42	Double integrals	29-03-2021	7
43	Triple integrals	To:	Lecture interspersed with discussions
44	Change of order of integration	10.	
45	Change of variable	17-03-2021	
46	Applications: Finding areas		
47	Finding volumes		

Brushes Signature of Faculty Mullelle

Signature of HOD

Course Title: C	OMMUNICATIVE ENGLISH		
Section : EEE			o: 01 of 03
Revision No : 0		Approv	ed By: HOD
Tools: Black bo			
No. of Periods	TOPIC	Date	Mode of
			Delivery
	wer full of happiness, Deliverance by Premcha		
	effective listening skills for better comprehens	ion of academic	e lectures and
	by native speakers English, Maruthi Publications, —The Individual Soc	ciety Pearson P	ublications
1	A Drawer full of happiness	08-01-21	
2	Listening : Short Audio Texts	08-01-21	
3	Speaking: Asking and answering questions	08-01-21	
4	Reading: Skimming and Scanning	19-01-21	Lecture
•	Reading . Skimming and Scanning	19-01-21	interspersed
5	Reading for Writing: Paragraph writing	19-01-21	with discussions
			discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	Long Answers	25-01-21	
10	Short Answers	27-01-21	
	's letter to his daughter Indira on her birthday, Bos appropriate reading strategies for comprehens naterials		
TB: Infotech Eng	lish, Maruthi Publications, —The Individual Societ	yl, Pearson Publ	ications
12	Nehru's letter to his daughter Indira on her		
	birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15 / /2	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16 w 4	Reading for Writing: Summarizing	03-02-21	with discussions
17	Vocabulary: Technical vocabulary	04-02-21	
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture interspersed
26	Speaking: Discussing specific topics in pairs	16-02-21	with
27	Reading: Reading a text in detail	17-02-21	uiscussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	a

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

Like a Tree, Unbowed: Wangari Maathaibiography

34 Listening: Making predictions while listening 03-03-21 Lecture interspersed

35 Speaking: Role plays for practice of conversational 04-03-21 with

		discussions
Reading: Studying the use of graphic elements	08-03-21	
Reading for Writing: Information transfer	10-03-21	
Vocabulary: Technical vocabulary	22-03-21	
Grammar: Quantifying expressions	24-03-21	
Telephone Conversation: Wole Soyinka	26-03-21	
	Reading: Studying the use of graphic elements Reading for Writing: Information transfer Vocabulary: Technical vocabulary Grammar: Quantifying expressions	Reading: Studying the use of graphic elements 08-03-21 Reading for Writing: Information transfer 10-03-21 Vocabulary: Technical vocabulary 22-03-21 Grammar: Quantifying expressions 24-03-21

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

.41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lectur
43	Speaking: Formal oral presentations	05-04-21	discuss
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	+

Signature of Faculty

Mulleloog

Signature of HOD

TENTATIVE LESSON PLAN R201104 ENGINEERING DRAWING

	NGINEERING DRAWING Cour	rse Code: R20	1104
Section : EEE	Date: 06-01-2021.	Page No: 01 of 02	
Revision No : 00	Prepared By: P. Kishorekumar	Approve	d By: HOD
Tools: Black bo	ard, PPTs		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I IN	TRODUCTION TO DRAWING		
CO1:Able to dr	aw the polygons, curves.		
	ng Drawing", by N.D. Butt &V.M. Panchal, C	Chariot Publis	hing House,
1	Introduction	11-01-2021	
2	Lettering and Dimensioning	14-01-2021	
3	Geometrical constructions	18-01-2021	
4	Parabola, Ellipse and Hyperbola	21-01-2021	Lecture
5	Polygons	25-01-2021	interspersed
6	Cycloids	28-01-2021	with
7	Involutes	01-02-2021	discussions
8	Vernier scales	04-02-2021	
9	Plain scales, diagonal scale	08-02-2021	
	TRODUCTION TO ORTHOGRAPHIC PRO		nlane and to
	raw the scales, projections of points and lines p	arallel to one	piane and to
other plan.	'- D	loCrow Hill P	uhlishers
2 nd Edition – 20	ing Drawing", by Agarwal & Agarwal, Tata M	icGraw IIII I	ublishers,
10	Projections of points in various quadrants	11-02-2021	
11			
11	Projections of lines lines parallel either of the	15-02-2021	Lecture
	Projections of lines, lines parallel either of the reference planes	15-02-2021	interspersed
12	reference planes	15-02-2021 18-02-2021	interspersed with
12	reference planes Determination of true lengths,		interspersed with
13	reference planes	18-02-2021	interspersed with
13 UNIT-III	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES	18-02-2021 22-02-2021	interspersed with discussions
13 UNIT-III I CO3:Able to d	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the	18-02-2021 22-02-2021 e planes and it	interspersed with discussions traces.
13 UNIT-III I CO3:Able to d TB:"Engineeri	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ng Drawing", by Agarwal & Agarwal, Tata M	18-02-2021 22-02-2021 e planes and it	interspersed with discussions traces.
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ong Drawing", by Agarwal & Agarwal, Tata Management of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, Take Track of the organization of true lengths, Take Track of the organization of true lengths, PROJECTIONS OF PLANES Take Track of the organization of true lengths, Take Track of the organization of true leng	18-02-2021 22-02-2021 e planes and it	interspersed with discussions traces.
13 UNIT-III I CO3:Able to d TB:"Engineeri	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray of the projection of lines inclined to both the ray of the projection of plane (parallel to one plane and	18-02-2021 22-02-2021 e planes and it cGraw Hill P	interspersed with discussions traces.
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray Drawing", by Agarwal & Agarwal, Tata M. Projection of plane (parallel to one plane and perpendicular to other plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P	interspersed with discussions traces. ublishers, 2 nd Lecture
13 UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray of the projection of lines inclined to both the ray of the projection of plane (parallel to one plane and perpendicular to other plane) Projection of plane (parallel to one plane and perpendicular to other plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P	interspersed with discussions traces. ublishers, 2"
13 UNIT-III I CO3:Able to d TB:"Engineerii Edition – 2015 14	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray Drawing", by Agarwal & Agarwal, Tata M. Projection of plane (parallel to one plane and perpendicular to other plane) Projection of plane (parallel to one plane and inclined to other plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P	interspersed with discussions straces. ublishers, 2" Lecture interspersed with
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray Drawing", by Agarwal & Agarwal, Tata M. Projection of plane (parallel to one plane and perpendicular to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P	interspersed with discussions straces. ublishers, 2" Lecture interspersed with
13 UNIT-III I CO3:Able to d TB:"Engineerii Edition – 2015 14 15 16 17	reference planes Determination of true lengths, Angle of inclination and traces. PROJECTIONS OF PLANES raw the projections of lines inclined to both the ray Drawing", by Agarwal & Agarwal, Tata M. Projection of plane (parallel to one plane and perpendicular to other plane) Projection of plane (parallel to one plane and inclined to other plane)	18-02-2021 22-02-2021 eplanes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021	interspersed with discussions straces. ublishers, 2" Lecture interspersed with
13 UNIT-III I CO3:Able to d TB:"Engineerii Edition – 2015 14 15 16 17 UNIT-IV P	Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 eplanes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021 08-03-2021	interspersed with discussions s traces. ublishers, 2 Lecture interspersed with discussions
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015 14 15 16 17 UNIT-IV P CO4:Able to i to both the pla	Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021 08-03-2021	interspersed with discussions s traces. ublishers, 2" Lecture interspersed with discussions olane inclined
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015 14 15 16 17 UNIT-IV P CO4:Able to i to both the pla	Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021 08-03-2021	interspersed with discussions s traces. ublishers, 2 nd Lecture interspersed with discussions olane inclined
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015 14 15 16 17 UNIT-IV P CO4:Able to i to both the pla TB:"Engineer	Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021 08-03-2021	interspersed with discussions s traces. ublishers, 2 nd Lecture interspersed with discussions olane inclined
UNIT-III I CO3:Able to d TB:"Engineeri Edition – 2015 14 15 16 17 UNIT-IV P CO4:Able to i to both the pla	Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (parallel to one plane and inclined to other plane) Projection of plane (inclined to both plane)	18-02-2021 22-02-2021 e planes and it cGraw Hill P 25-02-2021 01-03-2021 04-03-2021 08-03-2021	interspersed with discussions s traces. ublishers, 2 nd Lecture interspersed with discussions olane inclined

20	Cones with the axis inclined to both the planes	22-03-2021	with
21	Cylinders with the axis inclined to both the	25-03-2021	discussions
	planes		
UNIT-V Conv	version of isometric views to orthographic views		
CO5:Able to	identify the basic solids and draw the projection	ns of the solid	s inclined to
one of the plan	그리고 아내는 아래 아내는 아내는 이 없는 아내는 아내는 아내는 아내는 아내는 아내는 아내는 아내는 아내는 아내		
TB:"Engineer	ing Drawing", by Agarwal & Agarwal, Tata Mo	Graw Hill Pu	blishers, 2 nd
Edition - 2015			
22	Isometric views to orthographic views	29-03-2021	T
23	Orthographic views to isometric views.	01-04-2021	Lecture
24	Computer Aided Design	05-04-2021	interspersed
25	Drawing practice using Auto CAD	08-04-2021	with discussions
26	Creating 2D&3D drawings	12-04-2021	discussions

Signature of Faculty 06 012

Signature of HOD

Course Title: M Section : EEE		Date: 04-01-2021	Page No	:01 of 02
Revision No : 00)	Prepared By : S.KALPANA		d By: HOD
Tools: Black bo				
No. of Periods		TOPIC	Date	Mode of Delivery
VECTORS CO1: solve syste Seidel (L3) TB:" Engineerin	m of l	TEM OF LINEAR EQUATIONS, EIGEN Vinear algebraic equations using Gauss elinthematics", Dr. T.K.V.Iyengar; S.Chand	nination, Gauss Jo	
1	Intro	duction to matrices ,		
2	Rank	of matrix- definition, properties		
3	Probl	ems on rank by Echelon form		
4	Rank	by normal form		
5	PAQ	form problems		
6	Hom	ogeneous system AX=0		Lecture interspersed with
7	Non	Homogeneous system AX=B	From	
8	Probl	ems on rank method	06-01-2021	
9	Gaus	s Elimination method	To 23-01-2021	discussion
10	Eiger	n values – definition		
11	Prop	erties of Eigen values		
12	Prope	erties of Eigen values		
13	Prob	ems on finding eigen values, vectors		
14	Prob	ems on finding eigen values, vectors		
CO2: Develop the applications (L6	ne use)	AMILTON THEOREM, QUADRATIC FOR of matrix algebra techniques that is needed	d by engineers fo	r practical
B:" Engineerin 15		thematics", Dr. T.K.V.Iyengar; S.Chand Hamilton theorem, verification, problems	publications	
	Lale	raininion ineorem, verification, problems		

16	Finding inverse and power of a matrix by caley Hamilton theorem	0.000	o company and the contraction
17	Diagonalization – problems	Control of the marganisal of the control of the con	Service and a service
18	Quadratic forms – definition, examples	From:	Lecture
19	Matrix form of a quadratic form	25-01-2021	interspersed with
20	Canonical form of a quadratic form	To:	discussions
21	Methods of reducing a QF in to canonical form	06-02-2021	
22	Orthogonal reduction method		
23	Congruent operations method		
24	Lagrange's method		
25	Problems on finding nature of a QF		

UNIT-III: UNIT - III: ITERATIVE METHODS:

CO3: Avaluate approximating the roots of polynomial and transcendental equations by different algorithms (L5)

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

Introduction		
Method – 1: Bisection method	1	
Problems		
Method – 2: Regula falsi method	From:	
Problems	08-02-2021	
Method – 3: Iteration method	То:	
Problems	13-02-2021	Lecture
Method – 4: Newton Raphson method	&	interspersed
Problems	From:	with discussions
Newton Raphson method simultaneous equations		
Gauss Jacobi Method	To:	
Gauss Seidal Method	06-03-2021	
problems	Sec.	
	Problems Method – 2: Regula falsi method Problems Method – 3: Iteration method Problems Method – 4: Newton Raphson method Problems Newton Raphson method simultaneous equations Gauss Jacobi Method Gauss Seidal Method	Problems Method – 2: Regula falsi method Problems Method – 3: Iteration method Problems Method – 4: Newton Raphson method Problems Newton Raphson method simultaneous equations Gauss Jacobi Method Gauss Seidal Method From: 22-02-2021 To: 22-02-2021 To: 6-03-2021

UNIT - IV: INTERPOLATION

CO4: Apply Newton's forward & backward interpolation and Lagrange's formulae for equal and unequal intervals (L3)

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

	J-gar, et chang publicati	CILO
41	Introduction: Forward and Backward Differences	

Newton's Forward interpolation formula		
Problems	TOTAL MARKS OF THE STREET	N 19 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2
Newton's Backward interpolation formula	to the South Control of the Control	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Problems	From:	Lecture
Gauss Forward interpolation formula – Problems	08-03-2021	interspersed
Problems	T.	with
Gauss Backward interpolation formula – Problems		discussions
Problems		
Lagranges interpolation formula – Problems		
Problems		
Operators		
	Problems Newton's Backward interpolation formula Problems Gauss Forward interpolation formula – Problems Problems Gauss Backward interpolation formula – Problems Problems Problems Lagranges interpolation formula – Problems Problems	Problems Newton's Backward interpolation formula Problems Gauss Forward interpolation formula – Problems Problems Gauss Backward interpolation formula – Problems Problems Lagranges interpolation formula – Problems Problems Problems Problems

UNIT – V: NUMERICAL INTEGRATION AND SOLUTION OF ORDINARY DIFFERENTIAL EQUATION

CO5: Apply different algorithms for approximating the solutions of ordinary differential equations to its analytical computations (L3)

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

1b: Engine	ering Mathematics", Dr. T.K.V. Iyengar; S. Chand	publications	
53	Trapezoidal rule		
54	Simpson's 1/3 rule		
55	Problems		
56	Simpson's 3/8 rule		
57	Taylor's series method		
58	Problems	F	
59	Picard's method of successive approximation	From 29-03-2021	Lecture interspersed
60	Euler's method	To 17-04-2021	with discussions
61	Euler's modified method		
62	Problems		
63	Runge kutta method		
64	Problems	+	

S. Kalpana
Signature of Faculty

Signature of HOD

Course Title: PRO	GRAMMING FOR PROBLEM SOLVING	USING C (1R201110)
Section : EEE	Date: 08-01-2021	Page No: 01 of 03
Revision No: 00	Prepared By : B.S.S.TEJESH	Approved By : HOD

Tools: Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I	Introduction to C language		
	learn about the computer systems, computing environ	nments, developing of a	computer
orogram	and Structure of a C Program.	Distant E Cilbana CI	ENCACE
IBI: Pro	ogramming for Problem Solving, Behrouz A. Forouzan	, Richard F.Gilberg, Ci	ENGAGE
1	Creating and running Programs	8/1/21) · · · · · · · · · · · · · · · · · · ·
2	Computer Numbering System	9/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	Lecture
5	C Programs, Identifiers	19/1/21	Interspersed
6	Types, Variable	20/1/21	With
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	discussions
9	Scope	23/1/21	
10	Storage Classes	25/1/21	
11	Type Qualifiers	27/1/21	
12	Expressions Precedence	28/1/21	
13	Associativity	29/1/21	
14	Side Effects, Evaluating Expressions	30/1/21	
15	Type Conversion Statements	1/2/21	
16	Simple Programs	2/2/21	
17	Command Line Arguments	3/2/21	
18	Tutorial	4/2/21	
UNIT-II	Operators, Selection and Repetition		
CO2: To	gain knowledge of the operators, selection, control sta	tements and repetition	in C.
ГВ1: Pr	ogramming for Problem Solving, Behrouz A. Forouzan	, Richard F.Gilberg, C	ENGAGE
19	Exact Size Integer Types	5/2/21	TV
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	Lecture
23	Two Way Selection	10-12/2/21	interspersed
24	Multiway Selection	13/2/21	with
25	More Standard Functions	15/2/21	

Periods Delivery UNIT-III Arrays, String, Enum, Structure, Unions					
No. of	TOPIC	Date	Mode of		
35	Tutorial	26/2/21			
33	Programming Example				
32	Looping Applications	23-25/2/21			
31	Other Statements Related to Looping	22/2/21			
30	Loops in C	20/2/21			
29	Event and Counter Controlled Loops	19/2/21			
28	Initialization and Updating	18/2/21			
27	Pretest and Post-test Loops	17/2/21			
26	Concept of Loop	16/2/21	discussions		

To learn about their usage.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

I DI. I	ogramming for Froblem Sorring, Denrous in Foroussin,	restrict a romotion, or	11.011.02
36	Concepts, Using Array in C	27/2/21	
37	Array Application	1/3/21	
38	Two Dimensional Arrays	2/3/21	
39	Multidimensional Arrays	3/3/21	
40	Programming Example – Calculate Averages	4/3/21	
41	String Concepts, C String	5/3/21	
42	String Input / Output Functions	6-9/3/21	
43	Arrays of Strings	10/3/21	
44	String Manipulation Functions	11/3/21	
45	String/ Data Conversion	12/3/21	
46	A Programming Example	13-15/3/21	Lecture
47	The Type Definition (Type def)	16/3/21	interspersed
48	Enumerated Types	17/3/21	with
49	Structure	18-20/3/21	ļ
50	Unions	22-25/3/21	discussions
51	Programming Application	26-31/3/21	
52	Tutorial		

UNIT-IV **Pointers**

CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

No. of Periods	TOPIC	Date	Mode of Delivery
53	Introduction	1/4/21	
54	Pointers to pointers	2/4/21	
55	Compatibility, L value and R value	3/4/21	
56	Arrays, and Pointers	5/4/21	
57	Pointer Arithmetic and Arrays	6/4/21	Lecture
58	Memory Allocation Function	7/4/21	interspersed

59	Array of Pointers	8/4/21	with
60	Programming Application	9/4/21	discussions
61	Processor Commands	10/4/21	
62	Tutorial		
UNIT-V	Files and Functions		
CO5: To	assimilate about File I/O and significance of functions.		
TB1: Pr	ogramming for Problem Solving, Behrouz A. Forouzan,		CENGAGE
63	Designing, Structured Programs	12/4/21	
64	Function in C	13/4/21	
65	User Defined Functions	14/4/21	
66	Inter-Function Communication	15/4/21	
67	Standard Functions	16/4/21	
68	Passing Array to Functions	17/4/21	
69	Passing Pointers to Functions		
70	Recursion		Lecture interspersed
71	Passing an Array to Function	19/4/21	with
72	Files, Streams		discussions
73	Standard Library Input / Output Functions	20/4/21	
74	Formatting Input / Output Functions	21/4/21	
75	Character Input / Output Functions	22/4/21	
76	Text versus Binary Streams		
77	Functions for Files	23/4/21	
78	Converting File Type		
79	Tutorial	24/4/21	

Signature of Faculty

PRINCIPAL

Section : MEC	CH Date: 04-01-2021	Page No	: 01 of 02
Revision No : 0			d By : HOD
Tools: Black bo			
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize me TB:" Engineeri	ENCES, SERIES AND MEAN VALUE THEOR an value theorems to real life problems ng Mathematics", Dr. T.K.V.Iyengar; S.Chand p		
1	SEQUENCES AND SERIES: Convergence and Divergence		***
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series		interspersed
7	Leibnitz 's rule	To:	with
8	Mean Value Theorems:	23-01-2021	discussions
	Rolle 's Theorem		La constitue d
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
10	Cauchy s mean value meorem		
11	Taylor 's and Maclaurin 's theorems with		
11 UNIT-II DIE	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER AN		GREE
UNIT-II DIE CO2: Solve the	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineer magnetics", Dr. T.K.V.Iyengar; S.Chand publication: Differential Equations of First order	ring fields ublications	GREE
UNIT-II DIE CO2: Solve the ΓΒ:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand publication: Differential Equations of First order first degree	ring fields ublications	GREE
UNIT-II DIF CO2: Solve the FB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineers Mathematics", Dr. T.K.V.Iyengar; S.Chand publication: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ring fields ublications	GREE
UNIT-II DIE CO2: Solve the FB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand point Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ring fields ublications	GREE
UNIT-II DIE CO2: Solve the ΓΒ:" Engineerin 12 13 14 15	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ring fields ublications From:	GREE
UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineers Mathematics", Dr. T.K.V.Iyengar; S.Chand point Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ring fields ublications	
11 UNIT-II DIE CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation	ring fields ublications From: 25-01-2021	Lecture
11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FFERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	ring fields ublications From:	Lecture intersperse
11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineers Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	ring fields ublications From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIE CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	ring fields ublications From: 25-01-2021 To:	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineers Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	ring fields ublications From: 25-01-2021 To:	Lecture intersperse
11 UNIT-II DIE CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineeing Mathematics", Dr. T.K.V.Iyengar; S.Chand post Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	ring fields ublications From: 25-01-2021 To:	Lecture intersperse with

24	eering Mathematics", Dr. T.K.V.Iyengar; S.Chan		T
25	Linear DE of constant coefficients Solutions of $f(D) = O(x) O(x) = e^{gx}$	From: 08-02-2021	
26	Solutions of $f(D) = Q(x)$, $Q(x) = e^{ax}$ $Q(x) = \sin ax$ or $\cos ax$	To:	Lecture interspersed
27	$Q(x) = \sin ax \ or \cos ax$ $Q(x) = x^n$	13-02-2021	
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From:	discussions
30	$Q(x) = x^n \sin ax \ or \ \cos ax$	22-02-2021	
31	Method of variation of parameters	To:	
32	Applications: LCR Circuit	06-03-2021	
	RTIAL DIFFERENTIATION		
	rize with functions of several variables which is usering Mathematics", Dr. T.K.V.Iyengar; S.Chan		ion
33	Homogeneous function; Euler's Theorem		
34	Total Derivative; Chain rule	From:	
35	Taylor's mean value theorems	08-03-2021	Lastuma
36	Maclaurin's series		Lecture interspersed with discussions
37	Jacobians, formulae	To:	
38	Functional dependence	27-03-2021	
39	Maxima minima of two variables		
40	Langranges method		
	LTIPLE INTEGRALS double integration techniques in evaluating area	es hounded by roa	lon
D. " Ei-	ering Mathematics", Dr. T.K.V.Iyengar; S.Chan	d publications	ion
B: Engine	Introduction	From:	
41	7 11 1	29-03-2021	
	Double integrals .		
41	Triple integrals .	To	Lecture
41 42		To:	
41 42 43	Triple integrals .	To: 17-03-2021	interspersed
41 42 43 44	Triple integrals . Change of order of integration		interspersed with
41 42 43 44 45 46 47	Triple integrals Change of order of integration Change of variable		interspersed with

	OMMUNICATIVE ENGLISH		
Section : MEC			o: 01 of 03
Revision No: 00	1 1 2	Approv	ed By: HOD
Tools: Black bo		<u>'</u>	
No. of Periods	TOPIC	Date	Mode of
***********			Delivery
	wer full of happiness, Deliverance by Premcha		
	effective listening skills for better comprehens	ion of academic	lectures and
0 1	by native speakers nglish, Maruthi Publications, —The Individual So	oiotul Poorson P	ublications
1	A Drawer full of happiness	08-01-21	ublications
1	A Drawer full of happiness	08-01-21	
2	Listening : Short Audio Texts	08-01-21	1
3	Speaking: Asking and answering questions	08-01-21	
			Lecture
4	Reading: Skimming and Scanning	19-01-21	interspersed
			with
5	Reading for Writing: Paragraph writing	19-01-21	discussions
	Washalama Tashalad Washalama	20.01.21	
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	+
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	Long Answers ·	25-01-21	
10	Short Answers	27-01-21	
10	Short Answers	27-01-21	7.74.07
UNIT-II Nehru'	s letter to his daughter Indira on her birthday, Bos	om Friend by Hi	ra Bansode
	appropriate reading strategies for comprehens		
and authentic n			
	lish, Maruthi Publications, —The Individual Societ	v Pearson Publ	ications
	Nehru's letter to his daughter Indira on her	y ", I carson I doi	leations
12	birthday		
	on many		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
	Leging		Lecture
15 02-	Reading: Identifying sequence of ideas	02-02-21	interspersed

16	Reading for Writing: Summarizing	03-02-21	with
17	Vocabulary: Technical vocabulary	04-02-21	discussions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	-
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lectur
26	Speaking: Discussing specific topics in pairs	16-02-21	intersper with discussion
27	Reading: Reading a text in detail	17-02-21	discussio
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	1
32	Long Answers	26-02-21	-

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		170
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

STEAMER CALLES	English		discussio
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

TB: Infotech	English, Maruthi Publications, —The Individual Societ	yl, Pearson Pub	lications
41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture interspersed
43	Speaking: Formal oral presentations	05-04-21	with discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	<u> </u>
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	7

Signature of Faculty

Signature of HOD 1/21

	: Engineering Physics			•
Section :M			Page No :0	
Revision No	:00 Prepared By:B.NA	AGA JYOTHIRMAI	Approved	By: HOD
Tools:	The second section of the second section of the second second second section of the second section sec	en e	Andrew Control of the	remote weathing series
No. of	TOPIC	DATE		Mode of
Periods				Delivery
UNIT-I	WAVE OPTICS			
	CEO1:To identify the importance of the	e optical phenomeno	ni.e.	Lecture
	interference, diffraction and polarization			interspersed
		on related to its Engli	lecting	with discussions
	applications.	_		uiscussions
1	INTERFERENCE:Introduction	From:		
2	Principle of Superposition	08/01/202	1	
3	Coherent Sources-Types	00/01/202		
4	Interference- Types			
. 5	Interference in Thin Films	· To:		
6	Colours in Thin Film			
7	Newton's Rings	30/01/202	1	
8	Applications of Interference			
9	Problems			
10	Diffraction: Introduction			
11	Fresnel and			Lecture
	Fraunhoffer Diffraction .			interspersed
12	Fraunhoffer diffraction at single slit			with
13	Fraunhoffer diffraction at single slit			discussions
14	Fraunhoffer diffraction at Double Slit		2.00	
15	Fraunhoffer diffraction at N-Slits			
16	Grating Equation			
17	Dispersive Power of Grating			
18	Resolving Power of Grating			
19	Problems			
20	Polarization: Introduction			
21	Types of Polarization			
22	Polarization by Reflection, Refraction			
23	Polarization by Duoble Refraction			Lecture intersperse
24	Nicol Prism			with
25	Quarter Wave & Half Wave Plates			discussions
26	Problems			
UNIT-II	LASERS AND FIBER OPTICS			
	CEO2:Understand the mechanism of			
	utilization of lasers as coherent light so			
	applications, study of propagation of li their implications in optical communic		Dels alla	Lecture
27	Lasers: Introduction	auons.		intersperse
28	Characteristics of Laser	From:	12	with
29	Spontaneous and Stimulated emission	riom:	en Der en	discussions
30	Einstein's Coefficients		and the second second	
	LINSTON S COCHICICIIIS		and the second of Park of the second	THE RESERVE OF THE PARTY OF THE

_				
,	32	Pumping Mechanism-Pumping method		
1	33	Ruby Laser	To:	
	34	Helium Neon Laser		
	- 35	Applications of Lasers	13-02-2021	
t	36	Fiber Optics: Introduction		
T	37	Principle of Optical Fiber	and the second s	
-	38	Acceptance angle		
-	39	Numerical Aperture		
	40	Classifications optical fibers based on		
		refractive index profile and modes		
	41	Propagation of electromagnetic wave		
		through optical fibers.		
	42	Applications, Problems		
T	UNIT-III	ENGINEERING MATERIALS		
		CEO3:To explain the significant concep materials that leads to potential applications in		Lecture interspersed with
	43	Dielectric Materials: Introduction,		discussions
1	44	Dielectric polarization		
	45	Types of polarizations- Electronic		
		polarization		
	46	Ionic polarisation, Orientation		
-		polarizations		
-	47	Lorentz internal field		
	48	Clausius-Mossotti equation	T	
T	49	Piezoelectricity, Problems	From: 22-02-2021	
8	50	Magnetic Materials: Introduction	To	Lecture
Ī	51	Magnetic dipole moment,	10-03-2021	interspersed
		Magnetization, Magnetic	10-03-2021	with discussions
		susceptibility and permeability		discussions
	52	Origin of permanent magnetic		
		moment		
	53	Classification of magnetic		
		materials:Dia,Para,Ferro		
	54	COMM: Antiferro and Ferri		
		magnetic materials		
	55	Domain concept for Ferromagnetism,		
		Domainwalls		
	56	Hysteresis ,soft and hard magnetic		
		materials		
	57	Eddy currents and Applications		
	UNIT-IV	ACOUSTICS AND ULTRASONICS		
		CEO4:To study ultrasonics productions rapplications in various mechanical fields acoustics mainly Sabine's formula gives a echo and gives requirements of acoustical	of engineering. Also, study of awareness about reverberation	
-	58	Acoustics: Introduction,		
	59	Requirements of acoustically good hall		
	60	Reverberation, Reverberation time	Francis a final service of the service	
	* * * * * * * * * * * * * * * * * * *		From	Lecture
	61	Sabine's formula (Derivation lising		Doctaro
	61	Sabine's formula (Derivation using growth and decay method) -	12-03-2021	interspersed with

62	Sabine's formula (Derivation using		discussions
	growth and decay method) -	To	
	Absorption coefficient second part		
63	Sabine's formula (Derivation using	25-03-2021	
	growth and decay method) -		
	Absorption coefficient Review		
64	Absorption coefficient and its determination	to the second second property of the second	and the second of the second
65	Factors affecting acoustics of		
	buildings and their remedial		
	measures.		
66	Ultrasonics: Introduction, Properties		
67	Production by magnetostriction and		
	piezoelectric methods, Detection		
68	Acoustic grating		Lecture
69	Non Destructive Testing – pulse echo		interspersed
	system through transmission mode.		with discussions
			uiscussions
70	Non Destructive Testing – pulse echo		
	system through reflection modes,	•	
UNIT-IV	Applications CRYSTALLOGRAPHY AND X-RAY DIFFR CEO5:To Understand crystallography know the crystal systems and for the de	and X-ray diffraction used to	
	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg?	and X-ray diffraction used to etermination of crystal nation number. Also, Bragg's law	
UNIT-IV 71	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordinates.	and X-ray diffraction used to etermination of crystal nation number. Also, Bragg's law	
	CEO5:To Understand crystallography know the crystal systems and for the de structures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell	and X-ray diffraction used to etermination of crystal nation number. Also, Bragg's law	
71	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg's Crystallography: Space lattice, Basis, Unit Cell	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure.	Lecture
71	CEO5:To Understand crystallography know the crystal systems and for the de structures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure.	intersperse
71 72	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D)	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure. From	intersperse with
71	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coording gives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure. From 26-03-2021	intersperse with
71 72	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D)	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure. From	intersperse with
71 72 73 74	CEO5:To Understand crystallography know the crystal systems and for the de structures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC Packing fraction of BCC& FCC	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's laws angle in crystal structure. From 26-03-2021	intersperse
71 72 73	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's law s angle in crystal structure. From 26-03-2021	intersperse with
71 72 73 74 75	CRYSTALLOGRAPHY AND X-RAY DIFFR CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coording gives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC Packing fraction of BCC& FCC Miller indices — separation between successive (hkl) planes.	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's law s angle in crystal structure. From 26-03-2021	intersperse with
71 72 73 74	CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coordingives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's law s angle in crystal structure. From 26-03-2021	intersperse with discussion
71 72 73 74 75	CRYSTALLOGRAPHY AND X-RAY DIFFR CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coording gives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters, Bravais Lattice, crystal systems (3D) coordination number, Packing fraction of SC Packing fraction of BCC& FCC Miller indices — separation between successive (hkl) planes.	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's law s angle in crystal structure. From 26-03-2021	interspersed with discussions Lecture intersperse
71 72 73 74 75 76	CRYSTALLOGRAPHY AND X-RAY DIFFR CEO5:To Understand crystallography know the crystal systems and for the destructures, Packing fraction and Coording gives interplanar separation and bragg? Crystallography: Space lattice, Basis, Unit Cell lattice parameters ,Bravais Lattice ,crystal systems (3D) coordination number , Packing fraction of SC Packing fraction of BCC& FCC Miller indices – separation between successive (hkl) planes. X- ray diffraction: Bragg's law	and X-ray diffraction used to stermination of crystal nation number. Also, Bragg's law s angle in crystal structure. From 26-03-2021	intersperse with discussion

Raga Ythirmae Signature of Faculty

PRINCIPAL
SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108

Signature of HOD

TENTATIVE LESSON PLAN: R201104 ENGINEERING DRAWING

			Course Code: R201104	
Section : Sec I			Page No: 01 of 02 Approved By: HOD	
Revision No : 0			Approve	а ву : пов
Tools: Black bo	TOPIC		Date	Mode of
S.NO	Toric		Date	Delivery
UNIT-I IN	TRODUCTION TO DRAWING			
CO1:Able to di	raw the polygons, curves, scales			
ГВ:"Engineerii	ng Drawing", by N.D. Butt &V.M. Pancl	al, Char	iot Publis	shing House
Anand. 49 th Ed	ition – 2006.			
1	Introduction			
2	Lettering and Dimensioning			
3	Geometrical constructions, Polygons	100	From:	
4	Ellipse .	11	/01/2021	Lecture
5	Parabola and Hyperbola			intersperse
6	Cycloids .		To:	with .
7	Involutes	30	/01/2021	discussion
8	Vernier scales			
9	Plain scales, diagonal scale ECTIONS OF STRAIGHT LINES			
10 11 12	2 nd Edition – 2015. Projections of points in various quadrants Projections of lines, lines parallel either of reference planes and inclined to both plane True length determination and true angle of inclination Traces (inclined to both planes)	es U1	From: //02/2021 To: 6/02/2021	Lecture intersperse with discussion
	JECTIONS OF PLANES			
CO3:Able to ic to both the pla	dentify the different plans and draw the pnes. ing Drawing", by Agarwal & Agarwal, Ta	ta McGr		
14	Projection of plane (parallel to one plane a perpendicular to other plane)		From: 08/02/2021	Lecture intersperse with discussion
15	Projection of plane (parallel to one plane a inclined to other plane)	nd 08		
16	Projection of plane (inclined to both plane) 1	To:	
17	Projection of plane (inclined to both plane			
UNIT-IV	PROJECTIONS OF SOLIDS			
one of the plan	dentify the basic solids and draw the pro- les. ing Drawing", by Agarwal & Agarwal, Ta			

18	Projection of solids (Prisms, Cylinder)	From:	Lecture
19	Projection of solids (Prisms, Cylinder)	15/03/2021	interspersed
20	Projection of solids (Pyramids, cone)	To:	with
21	Projection of solids (Pyramids, cone)	03/04/2021	discussions

UNIT-V ISOMETRIC PROJECTIONS

CO5:Able to represent and convert the isometric view to orthographic view and orthographic view to isometric view.

TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2nd Edition – 2015.

22	Conversion of isometric views to orthographic views		
23	Conversion of isometric views to orthographic views	From: 10/04/2021 To: 24/04/2021	Lecture interspersed with discussions
24	Conversion of orthographic views to isometric views		
25	Computer Aided Design, Drawing practice using Auto CAD		

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: 1R201110

Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C (1R201110)				
Section : MECH	Date: 08/01/21	A.Y:2020-21		
Revision No: 00	Prepared By: M.SURESH BABU	Approved By : HOD		

Tools: Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
U NIT-I	Introduction to C language		
	o learn about the computer systems, computing envi	ronments, developing of	a computer
	and Structure of a C Program.		TNG LOT
ГВ1: Pr	ogramming for Problem Solving, Behrouz A. Forouz	zan, Richard F.Gilberg, C	ENGAGE
1	Creating and running Programs	08/1/21	
2	Computer Numbering System	09/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	Lecture
5	C Programs, Identifiers	19/1/21	Interspersed
6	Types, Variable	20/1/21	With
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	discussions
9	Scope	23/1/21	
10	Storage Classes	25/1/21	
11	Type Qualifiers	27/1/21	
12	Expressions Precedence	28/1/21	
13	Associativity	29/1/21	
14	Side Effects, Evaluating Expressions	30/1/21	
15	Type Conversion Statements	1/2/21	
16	Simple Programs	2/2/21	
17	Command Line Arguments	3/2/21	
18	Tutorial	4/2/21	
UNIT-I	Operators, Selection and Repetition		
	o gain knowledge of the operators, selection, control	statements and repetition	in C.
	ogramming for Problem Solving, Behrouz A. Forou		
	T= 0. 7	5/0/01	
19	Exact Size Integer Types	5/2/21	
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	Lecture
23	Two Way Selection	12/2/21	interspersed
24	Multiway Selection	13/2/21	with
25	More Standard Functions	15/2/21	discussions
26	Concept of Loop Pretest and Post-test Loops	16/2/21 17/2/21	

No. of Periods	TOPIC	Date	Delivery
NI- of	TOPIC	Date	Mode of
35	Tutorial	26/2/21	
33	Programming Example		
32	Looping Applications	25/2/21	
31	Other Statements Related to Looping	22/2/21	
30	Loops in C	20/2/21	
29	Event and Counter Controlled Loops	19/2/21	
28	Initialization and Updating	18/2/21	

UNIT-III Arrays, String, Enum, Structure, Unions

CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

IDI: FI	rogramming for Troblem Solving, Denrouz A. Porouzan,		Eritorion
36	Concepts, Using Array in C	27/2/21	
37	Array Application	1/3/21	
38	Two Dimensional Arrays	2/3/21	
39	Multidimensional Arrays	3/3/21	
40	Programming Example – Calculate Averages	4/3/21	
41	String Concepts, C String	5/3/21	
42	String Input / Output Functions	6/3/21	
43	Arrays of Strings	10/3/21	
44	String Manipulation Functions	11/3/21	
45	String/ Data Conversion	12/3/21	
46	A Programming Example	13/3/21	Lecture
47	The Type Definition (Type def)	16/3/21	interspersed
48	Enumerated Types	17/3/21	with
49	Structure	18/3/21	1:
50	Unions	22/3/21	discussions
51	Programming Application	26/3/21	
52	Tutorial		
Programme and the second secon			

UNIT-IV Pointers

CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

No. of Periods	TOPIC	Date	Mode of Delivery
53	Introduction	1/4/21	
54	Pointers to pointers	2/4/21	
55	Compatibility, L value and R value	3/4/21	
56	Arrays, and Pointers	5/4/21	
57	Pointer Arithmetic and Arrays	6/4/21	Lecture
58	Memory Allocation Function	7/4/21	interspersed
59	Array of Pointers	8/4/21	with
60	Programming Application	9/4/21	discussions
61	Processor Commands	10/4/21	
62	Tutorial		

UNIT-V			
CO5: T	o assimilate about File I/O and significance of functions.		THE LOT
TB1: P	rogramming for Problem Solving, Behrouz A. Forouzan	, Richard F.Gilberg, C	ENGAGE
· 63	Designing, Structured Programs	12/4/21	
64	Function in C	13/4/21	
65	User Defined Functions	14/4/21	
66	Inter-Function Communication	15/4/21	
67	Standard Functions	16/4/21	
68	Passing Array to Functions		
69	Passing Pointers to Functions	17/4/21	Lastuma
70	Recursion		Lecture interspersed
71	Passing an Array to Function	19/4/21	with
72	Files, Streams		discussions
73	Standard Library Input / Output Functions	20/4/21	
74	Formatting Input / Output Functions	21/4/21	
75	Character Input / Output Functions	22/4/21	
76	Text versus Binary Streams		
77	Functions for Files	23/4/21	
78	Converting File Type		
79	Tutorial	24/4/21	

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R201101

Section : ECE-	ATHEMATICS – 1 A Date: 04-01-2021	Page No.	: 01 of 02
Revision No: 00			$\frac{1}{d}$ By: HOD
Tools: Black box		Approve	d by . HOD
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize mea	ENCES, SERIES AND MEAN VALUE THEOR) In value theorems to real life problems Ing Mathematics", Dr. T.K.V.Iyengar; S.Chand pu		
1	SEQUENCES AND SERIES: Convergence and Divergence		
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series	T	interspersed
7	Leibnitz 's rule	To:	with
8	Mean Value Theorems: Rolle 's Theorem	23-01-2021	discussions
	Rolle 3 Theorem		
ġ	Lagrange 's mean value theorem		
9 10	Lagrange 's mean value theorem Cauchy 's mean value theorem		
10 11 UNIT-II DIF	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND		GREE
10 11 UNIT-II DIF CO2: Solve the	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields ablications From:	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANdifferential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields	GREE Lecture
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Englished Equations Linear Differential Equations Englished Exact Bernouli Equation	ing fields ablications From:	Lecture
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture interspersed with
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19 20	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Conditions of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture interspersed
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Lagrange 's mean value theorem Cauchy 's mean value theorem Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture interspersed with

1B: Engineer	ing Mathematics", Dr. T.K.V.Iyengar; S.Cha	nd publications	10.000
24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	intersperse
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From: 22-02-2021	discussion
30	$Q(x) = x^n \sin ax \ or \cos ax$	To:	
31	Method of variation of parameters		
32	Applications: LCR Circuit	06-03-2021	
33	Simple Harmonic Motion		
35	Total Derivative; Chain rule	From:	
CO4: Familiriz TR:" Engineeri	te with functions of several variables which is ng Mathematics", Dr. T.K.V.Iyengar; S.Chai	useful in optimiza	tion
34	Homogeneous function; Euler's Theorem	to the total district of the second	
36			
	Taylor's mean value theorems Maclaurin's series	08-03-2021	Lecture
		그는 그리는 사람들이 살아가 하나 없는 것이 되는 것이 되는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이다.	
37		To:	
38	Jacobians, formulae	To:	with
		To: 27-03-2021	with
38 39 40	Jacobians, formulae		with
38	Jacobians, formulae Functional dependence	27-03-2021	interspersed with discussions
38 39 40 41	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method	27-03-2021	with
38 39 40 41 UNIT-V: MULTI CO5: Apply do	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method	27-03-2021	with discussions
38 39 40 41 UNIT-V: MULTI	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area	27-03-2021	with discussion
38 39 40 41 UNIT-V: MULTI CO5: Apply do TB:" Engineeri	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area ing Mathematics", Dr. T.K.V.Iyengar; S.Char	27-03-2021 as bounded by regind publications	with discussion
38 39 40 41 UNIT-V: MULTI CO5: Apply do FB:" Engineeri	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area mg Mathematics", Dr. T.K.V.Iyengar; S.Chan Introduction	as bounded by regind publications From: 29-03-2021.	with discussion.
38 39 40 41 UNIT-V: MULTI CO5: Apply do FB: Engineeri 42 43	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area in mathematics, Dr. T.K.V.Iyengar; S.Chan Introduction Double integrals	27-03-2021 as bounded by regind publications From:	with discussion ion Lecture interspersed
38 39 40 41 UNIT-V: MULTI CO5: Apply do ΓΒ:" Engineeri 42 43 44	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area ing Mathematics", Dr. T.K.V.Iyengar; S.Char Introduction Double integrals Triple integrals	as bounded by regind publications From: 29-03-2021.	with discussion.
38 39 40 41 UNIT-V: MULTI CO5: Apply do TB:" Engineeri 42 43 44 45	Jacobians, formulae Functional dependence Maxima minima of two variables Langranges method PLE INTEGRALS uble integration techniques in evaluating area mg Mathematics", Dr. T.K.V.Iyengar; S.Char Introduction Double integrals Triple integrals Change of order of integration	27-03-2021 as bounded by regind publications From: 29-03-2021. To:	with discussions discussions Lecture interspersed

S. kalpana
Signature of Faculty

10 milled

Signature of HOD

TENTATIVE LESSON PLAN: R201101

Section : ECE-	ATHEMATICS – 1 -B Date: 04-01-2021	Page No	: 01 of 02
Revision No : 00	Prepared By : B.V.RAMAKRISHNA RA	O Approve	d By: HOD
Tools: Black bo	ard		
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize me	ENCES, SERIES AND MEAN VALUE THEORI an value theorems to real life problems		
	ng Mathematics", Dr. T.K.V.Iyengar; S.Chand pu	blications	
1	SEQUENCES AND SERIES:		
•	Convergence and Divergence		
3	Ratio test		
	Comparison test	From:	
4	Integral test	06-01-2021	Lecture
5	Cauchy 's root test	00-01-2021	interspersed
6	Alternating series	To:	with
7	Leibnitz 's rule	23-01-2021	discussions
8	Mean Value Theorems: Rolle 's Theorem	25-01-2021	discussions
9	Lagrange 's mean value theorem		100
10	Cauchy 's mean value theorem		
	Taylor 's and Maclaurin 's theorems with		
11 UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND ALLEGE		GREE
11 UNIT-II DIF CO2: Solve the	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer of Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer of Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer of Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields blications From:	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	
UNIT-II DIF CO2: Solve the B:" Engineerin	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations	From: 25-01-2021	Lecture
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer of Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Equations reducible to linear	ing fields blications From:	Lecture interspersed
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture interspersed with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021 To:	Lecture interspersed
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021 To:	Lecture interspersed with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021 To:	Lecture intersperse with

UNIT-III: LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER

CO3: Solve the differential equations related to various engineering fields

			0	•
TR." Engineering Math	ematics" D	TKV Ivengar	. S Chand	nublications

24	Linear DE of constant coefficients	From:	<u> </u>
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From:	discussions
30	$Q(x) = x^n \sin ax \ or \ \cos ax$	22-02-2021	
31	Method of variation of parameters	To:	
32	Applications: LCR Circuit	06-03-2021	

UNIT-IVPARTIAL DIFFERENTIATION

CO4: Familirize with functions of several variables which is useful in optimization

TB: "Engineering Mathematics", Dr. T.K.V. Ivengar: S. Chand publications

33	Homogeneous function; Euler's Theorem	au publications	
34	Total Derivative; Chain rule	From:	Lecture
35	Taylor's mean value theorems	08-03-2021	
36	Maclaurin's series		interspersed
37	Jacobians, formulae	To:	with
38	Functional dependence	27-03-2021	discussions
39	Maxima minima of two variables		
40	Langranges method		

UNIT-V: MULTIPLE INTEGRALS

CO5: Apply double integration techniques in evaluating areas bounded by region TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

-41	Introduction	From:	Lecture interspersed with discussions
42	Double integrals .	29-03-2021	
43	Triple integrals	To:	
44	Change of order of integration	10.	
45	Change of variable	17-03-2021	
46	Applications: Finding areas		
47	Finding volumes		

Brushie Signature of Faculty Junillage

Signature of HOD

TENTATIVE LESSON PLAN: R201102

	COMMUNICATIVE ENGL	LISH		
Section : EC				o: 01 of 03
Revision No:		Prepared By: Yellamanda Vusa Approve		red By: HOD
Tools: Black b			T	
No. of Periods	TOPI	(C	Date	Mode of Delivery
UNIT-1: A Dr	wer full of happiness, Deliv	verance by Premchand	d	
CO1: Facilitat	e effective listening skills for	r better comprehensio	n of academic	lectures and
	by native speakers			
	English, Maruthi Publications	s, —The Individual Soci		ublications
1	A Drawer full of happiness		08-01-21	
2	Listening: Short Audio Tex	xts	08-01-21	-
3	Speaking: Asking and answ	vering questions	08-01-21	+
		•		Lecture
4	Reading: Skimming and So	canning	19-01-21	interspersed
5	Reading for Writing: Para	graph writing	19-01-21	with discussions
6	Vocabulary: Technical Voc	cabulary	20-01-21	
7	Grammar: Content words	and function words	20-01-21	
8	The Deliverance : Munshi Pr	rem Chand	21-01-21	
9	Long Answers		25-01-21	
10	Short Answers		27-01-21	1.00
	's letter to his daughter Indir			
	appropriate reading strate	egies for comprehension	on of various a	academic texts
and authentic		T. I 10		
	glish, Maruthi Publications, —		, Pearson Publ	ications
12	Nehru's letter to his daught birthday	ter indira on ner		
13	Listening: Answering a serie	es of questions	28-01-21	
14	Speaking: Discussion in pair	rs	01-02-21	
15	Reading: Identifying sequen	as of ideas	02-02-21	Lecture

16	Reading for Writing: Summarizing	03-02-21	with discussions
17	Vocabulary: Technical vocabulary	04-02-21	uiscussions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture interspersed
26	Speaking: Discussing specific topics in pairs	16-02-21	with discussions
27	Reading: Reading a text in detail	17-02-21	discussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

	English.		discussions
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture intersperse
43	Speaking: Formal oral presentations	05-04-21	with discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	†
46	Vocabulary: Technical vocabulary	10-04-21	+
47	Grammar: Editing short texts	12-04-21	

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R201102

	OMMUNICATIVE ENGLISH		
Section : ECE-			
Revision No : 00		Approv	ed By: HOD
Tools: Black bo No. of Periods	TOPIC	Date	Mode of Delivery
CO1: Facilitate English spoken	wer full of happiness, Deliverance by Premchan effective listening skills for better comprehensi- by native speakers English, Maruthi Publications, —The Individual Soc	on of academic	lectures and
1	A Drawer full of happiness	08-01-21	

2	Listening : Short Audio Texts	08-01-21	
3	Speaking: Asking and answering questions	08-01-21	Lecture
4	Reading: Skimming and Scanning	19-01-21	interspersed
5	Reading for Writing: Paragraph writing	19-01-21	with discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	.20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	Long Answers .	25-01-21	
10	Short Answers	27-01-21	
CO2: Focus on and authentic nTB: Infotech Eng	lish, Maruthi Publications, —The Individual Society	ion of various a	cademic texts
12	Nehru's letter to his daughter Indira on her birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16	Reading for Writing: Summarizing	03-02-21	with
17	Vocabulary: Technical vocabulary	04-02-21	
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications Stephen Hawking-Positivity 'Benchmark 11-02-21 Listening: Listening for global comprehension 15-02-21 25 Lecture interspersed Speaking: Discussing specific topics in pairs 16-02-21 26 with discussions 27 Reading: Reading a text in detail 17-02-21 Reading for Writing: Summarizing 19-02-21 28 Vocabulary: Technical vocabulary 29 22-02-21 Grammar: Verbs - tenses; subject-verb agreement 30 22-02-21 31 Shakespeare's Sister by Virginia Woolf 24-02-21 32 Long Answers 26-02-21

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications. —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

$\begin{split} & \mathcal{A}(\mathbf{w}, \mathbf{v}) = \mathcal{A}(\mathbf{v}, \mathbf{v}, \mathcal{D}), \forall \mathbf{v} \in \mathcal{A}(\mathbf{v}) \text{ as } \mathbf{v} \in \mathbf{w} \in \mathbf{W}(\mathcal{A}, \mathcal{D}), \\ & \mathcal{A}(\mathbf{v}) = \mathcal{A}(\mathbf{v}, \mathbf{v}) + \mathcal{A}(\mathbf{v}, \mathbf{v}) + \mathcal{A}(\mathbf{v}, \mathbf{v}) + \mathcal{A}(\mathbf{v}, \mathbf{v}) + \mathcal{A}(\mathbf{v}, \mathbf{v}) \end{split}$	English	es, and reserve exercises the control of the contro	discussions
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture interspers
43	Speaking: Formal oral presentations	05-04-21	with discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	

Signature of Faculty

PRINCIPAL

Signature of HOD

TENTATIVE LESSON PLAN: R201104 ENGINEERING DRAWING

	GINEERIN	O DIMITIO		Code:R201 Page No:	01 of 02
ection : ECE-	A Date:0	6-01-2021.		Approved	By: HOD
evision No: 00		red By: G. Durga Prasad		пррионе	
ools: Black bo	rd, PPTs	TODIC		Date	Mode of
o. of Periods		TOPIC		Dute	Delivery
NIT-I INT	RODUCTIO	ON TO DRAWING			
CO1:Able to dr	aw the polygo	ons, curves.			
B."Engineerin	g Drawing",	by N.D. Butt &V.M. Pancha	al, Cha	riot Publis	hing House,
nand. 49 th Edi	tion – 2006.				
1	Introduction			2-01-2021	
2	Lettering and	d Dimensioning		9-01-2021	
3	Geometrical	constructions	7,4	1-01-2021	
4	Parabola, El	lipse and Hyperbola		8-01-2021	Lecture
5	Polygons			2-02-2021	interspersed
6	Cycloids			4-02-2021	with
7	Involutes			9-02-2021	discussions
8	Vernier scal	es	1	1-02-2021	
. 9		, diagonal scale	1	6-02-2021	
UNIT-II II	THEORY	ION TO ORTHOGRAPHIC	PROJE	CTIONS	
Ib. Enginee	ing Drawing	", by Agarwal & Agarwal, Ta	ita ivico	JIAW IIIII I	ublishers,
2 nd Edition – 2	015.				
2 nd Edition – 2 10	Projections	of points in various quadrants		8-02-2021	Lecture
2 nd Edition – 2	Projections Projections	of points in various quadrants of lines, lines parallel either of			Lecture interspersed
2 nd Edition – 2 10 11	Projections Projections reference p	of points in various quadrants of lines, lines parallel either of lanes	the 2	8-02-2021 23-02-2021	Lecture interspersed with
2 nd Edition – 2 10 11	Projections Projections reference p Determinat	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths,	the 2	8-02-2021 23-02-2021 25-02-2021	Lecture interspersed with
2 nd Edition – 2 10 11 12 13	Projections Projections reference p Determinat Angle of in	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces.	the 2	8-02-2021 23-02-2021	Lecture interspersed with
2 nd Edition – 2 10 11 12 13	Projections Projections reference p Determinat Angle of in	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. DNS OF PLANES	the 2	8-02-2021 23-02-2021 25-02-2021 02-03-2021	Lecture interspersed with discussions
2 nd Edition – 2 10 11 12 13 UNIT-III	Projections Projections reference p Determinat Angle of in	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES actions of lines inclined to bot	the 2	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in	Lecture interspersed with discussions ts traces.
2 nd Edition – 2 10 11 12 13 UNIT-III	Projections Projections reference p Determinat Angle of in	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES actions of lines inclined to bot	the 2	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in	Lecture interspersed with discussions ts traces.
2 nd Edition – 2 10 11 12 13 UNIT-III	Projections Projections reference p Determinat Angle of in PROJECTION Traw the projections of Drawing's	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta	the 2	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in	Lecture interspersed with discussions ts traces.
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to G	Projections Projections reference p Determinat Angle of in PROJECTIO raw the proj ng Drawing' . Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a	the 2	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in	Lecture interspersed with discussions ts traces.
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to C TB:"Engineer Edition – 201:	Projections Projections reference p Determinat Angle of in PROJECTIO raw the proj ng Drawing' Projection perpendicu	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane)	the 2 the 2 th the p ta McC	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and it Graw Hill F	Lecture interspersed with discussions ts traces. Publishers, 2" Lecture
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to C TB:"Engineer Edition – 201:	Projections Projections reference p Determinat Angle of in PROJECTION Araw the projection Projection Projection Projection Projection Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a	the 2 the 2 th the p ta McC	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in	Lecture interspersed with discussions ts traces. Publishers, 2 Lecture intersperse
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to 0 TB:"Engineer Edition – 201:	Projections Projections reference p Determinat Angle of in PROJECTION Araw the projection perpendicular projection inclined to	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane)	the 2 the 2 th the p ta McC	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021	Lecture interspersed with discussions ts traces. Publishers, 2 Lecture interspersed with
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to 0 TB:"Engineer Edition – 201:	Projections Projections Projections reference p Determinat Angle of in PROJECTION Traw the projection perpendicular projection inclined to Projection Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane)	the 2 the part of	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021 09-03-2021	Lecture interspersed with discussions ts traces. Publishers, 2 Lecture intersperse with discussions
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to C TB:"Engineer Edition – 2013 14 15 16 17	Projections Projections Projections reference p Determinat Angle of in PROJECTION Traw the projection perpendicut Projection inclined to Projection Projection Projection Projection Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane) of plane (inclined to both plane)	the 2 the part of	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021	Lecture interspersed with discussions ts traces. Publishers, 2 Lecture intersperse with discussions
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to 0 TB:"Engineer Edition – 201: 14 15 16 17 UNIT IV	Projections Projections reference p Determinat Angle of in PROJECTION Angle of in PROJECTION Projection perpendicular Projection inclined to Projection Projection Projection Projection PROJECTION	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane of plane (inclined to both plane of plane (inclined to both plane	the 2 the 2 the part of the	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021 09-03-2021 16-03-2021 18-03-2021	Lecture interspersed with discussions ts traces. Publishers, 2 ⁿ Lecture intersperse with discussion
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to C TB:"Engineer Edition – 201: 14 15 16 17 UNIT-IV	Projections Projections reference p Determinat Angle of in PROJECTION Angle of in PROJECTION Projection perpendicular Projection inclined to Projection Projection Projection Projection PROJECTION	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane of plane (inclined to both plane of plane (inclined to both plane	the 2 the 2 the part of the	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021 09-03-2021 16-03-2021 18-03-2021	Lecture interspersed with discussions ts traces. Publishers, 2 ⁿ Lecture intersperse with discussion
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to of TB:"Engineer Edition – 201: 14 15 16 17 UNIT-IV CO4:Able to	Projections Projections reference p Determinat Angle of in PROJECTION Angle of in PROJECTION PROJECTION Projection perpendicu Projection inclined to Projection Projection Projection Projection Projection Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane of plane) ONS OF SOLIDS different plans and draw the	the 2 the 2 the 2 th the p ta McC and and c) project	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021 16-03-2021 18-03-2021 ions of the	Lecture interspersed with discussions ts traces. Publishers, 2 ^r Lecture intersperse with discussions plane incline
2 nd Edition – 2 10 11 12 13 UNIT-III CO3:Able to of TB:"Engineer Edition – 201: 14 15 16 17 UNIT-IV CO4:Able to	Projections Projections reference p Determinat Angle of in PROJECTION Angle of in PROJECTION PROJECTION Projection perpendicu Projection inclined to Projection Projection Projection Projection Projection Projection	of points in various quadrants of lines, lines parallel either of lanes ion of true lengths, clination and traces. ONS OF PLANES ections of lines inclined to bot ', by Agarwal & Agarwal, Ta of plane (parallel to one plane a lar to other plane) of plane (parallel to one plane a other plane) of plane (inclined to both plane of plane (inclined to both plane of plane (inclined to both plane	the 2 the 2 the 2 th the p ta McC and and c) project	8-02-2021 23-02-2021 25-02-2021 02-03-2021 lanes and in Graw Hill F 04-03-2021 16-03-2021 18-03-2021 ions of the	Lecture interspersed with discussions ts traces. Publishers, 2 ⁿ Lecture intersperse with discussion plane incline

Lecture

interspersed

23-03-2021

25-03-2021

Edition – 2015.

18

19

Projections of Solids

Prisms, Pyramids

20	Cones with the axis inclined to both the planes	30-03-2021	with
21	Cylinders with the axis inclined to both the	01-04-2021	discussions
	planes		

UNIT-V Conversion of isometric views to orthographic views

CO5:Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.

TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2^{nd} Edition – 2015.

22	Isometric views to orthographic views	06-04-2021	Tastons
23	Orthographic views to isometric views.	08-04-2021	Lecture
24	Computer Aided Design	20-04-2021	interspersed with
25	Drawing practice using Auto CAD	20-04-2021	discussions
26	Creating 2D&3D drawings	22-04-2021	discussions

Signature of Faculty

Date: 06 1 21

Signature of HOD

Date:

PRINCIPAL

TENTATIVE LESSON PLAN R201104 ENGINEERING DRAWING

Course Title: EN	NGINEERING DRAWING	Course	Code: R201	
Section : ECE-			Page No:	
Revision No: 00	Prepared By: P. Kishorekumar		Approved	By: HOD
Fools: Black bo	ard, PPTs			25.1.0
No. of Periods	TOPIC		Date	Mode of
				Delivery
UNIT-I INT	TRODUCTION TO DRAWING			
CO1:Able to dr	aw the polygons, curves.			
ΓB:"Engineerin	g Drawing", by N.D. Butt &V.M. Panel	hal, Cha	riot Publis	hing House,
Anand. 49 th Edi	tion – 2006.			
1	Introduction		-01-2021	
2	Lettering and Dimensioning		1-01-2021	
3	Geometrical constructions		3-01-2021	
4	Parabola, Ellipse and Hyperbola		1-01-2021	Lecture
5	Polygons		5-01-2021	interspersed
6	Cycloids		8-01-2021	with
7	Involutes		1-02-2021	discussions
8	Vernier scales		4-02-2021	
9	Plain scales, diagonal scale		8-02-2021	
UNIT-II IN	TRODUCTION TO ORTHOGRAPHIC	PROJE	CTIONS	
10 11	Projections of points in various quadrants Projections of lines, lines parallel either of		1-02-2021 5-02-2021	Lecture interspersed
11		the 1	3-02-2021	interspersed
12	reference planes Determination of true lengths,	1	8-02-2021	with
12	Angle of inclination and traces.		2-02-2021	discussions
	PROJECTIONS OF PLANES	2	2 02 2021	
		th the nl	anes and its	traces.
CO3:Able to d	raw the projections of lines inclined to bo	th the pr	anes and re	blishors 2
TB: "Engineering	ng Drawing", by Agarwal & Agarwal, Ta	ata McG	raw mm r	ionshers, 2
Edition – 2015.	Projection of plane (parallel to one plane)	and 2	5-02-2021	
14	perpendicular to other plane)	and 2	.5 02 2021	Lecture
15	Projection of plane (parallel to one plane)	and (1-03-2021	intersperse
13	inclined to other plane)	una	71 05 2021	with
16	Projection of plane (inclined to both plane	e) (e	04-03-2021	discussion
17	Projection of plane (inclined to both plane)	/	08-03-2021	
	PROJECTIONS OF SOLIDS	, ,		
		projectio	one of the n	lane incline
	dentify the different plans and draw the	projection	ms or the p	iane menne
to both the pla	nes. ing Drawing", by Agarwal & Agarwal, T	ata McG	raw Hill P	ublishers, 2
Edition – 2015	ing Diawing, by Agaiwai & Agaiwai, i	11100		
18	Projections of Solids		11-03-2021	Lecture
19	Prisms, Pyramids		15-03-2021	intersperse

20	Cones with the axis inclined to both the planes	22-03-2021	with
21	Cylinders with the axis inclined to both the	25-03-2021	discussions
	planes		
UNIT-V Con	version of isometric views to orthographic views		
CO5:Able to	identify the basic solids and draw the projection	ns of the solid	s inclined to
one of the pla	ines.		
TB:"Enginee	ring Drawing", by Agarwal & Agarwal, Tata Mo	Graw Hill Pu	blishers, 2 nd
Edition - 201	5.		
22	Isometric views to orthographic views	29-03-2021	т
22	Orthographia viavya to igametria viavya	01 04 2021	Lecture

22	Isometric views to orthographic views	29-03-2021	T
23	Orthographic views to isometric views.	01-04-2021	Lecture
24	Computer Aided Design	05-04-2021	interspersed with
25	Drawing practice using Auto CAD	08-04-2021	discussions
26	Creating 2D&3D drawings	12-04-2021	uiscussions

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R20111()

Course Title: PROC	GRAMMING FOR PROBLEM SOLVING US	SING C
Section : Sec A	Date: 08-01-2021	Page No: 01 of 03
Revision No: 00	Prepared By : CH SIVA RAJESH	Approved By : HOD

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I	88		· ·
progran	To learn about the computer systems, computing and Structure of a C Program.		
	rogramming for Problem Solving, Behrouz A.	Forouzan, Richard F.Gilberg,	CENGAGE
1	Computer Systems	8-01-2021	
2	Computing Environments	8-01-2021	
3	Computer languages	9-01-2021	Timber .
3 4	Computer languages Creating and running Programs	9-01-2021 9-01-2021	Lecture

	Compater Systems	0-01-2021	
2	Computing Environments	8-01-2021	
3	Computer languages	9-01-2021	
4	Creating and running Programs	9-01-2021	Lecture
5	Computer Numbering System	10-01-2021	Interspersed
6	Storing Integers	12-01-2021	With
7	Storing Real Numbers	18-01-2021	
8	C Programs, Identifiers	20-01-2021	discussions
9	Types, Variable	21,23-01-2021	
10	Constants, Input/output	24,27-01-2021	
11	Programming Examples	27-01-2021	
12	Scope, Storage Classes and Type Qualifiers	29-01-2021	The state of the s
13	Expressions Precedence and Associativity	1-02-2021	
14	Side Effects, Evaluating Expressions	2-02-2021	
15	Type Conversion Statements	3-02-2021	
16	Simple Programs	4-02-2021	
17	Command Line Arguments	5-02-2021	
18	Tutorial	6-2-2021	

UNIT-II Operators, Selection and Repetition

CO2: To gain knowledge of the operators, selection, control statements and repetition in C. TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

19	Exact Size Integer Types	6-02-2021	
20	Logical Bitwise Operators	8-02-2021	
21	Shift Operators	9-02-2021	
22	Logical Data and Operators	10-02-2021	
23	Two Way Selection	11-02-2021	Lecture interspersed
24	Multiway Selection	12-02-2021	micrspersed

25	More Standard Functions	13-02-2021	with
26	Concept of Loop	15-02-2021	discussions
27	Pretest and Post-test Loops	16-02-2021	
28	Initialization and Updating	17-02-2021	
29	Event and Counter Controlled Loops	18-02-2021	
30	Loops in C	19-02-2021	
31	Other Statements Related to Looping	20-02-2021	
32	Looping Applications	22-02-2021	
33	Programming Example The Calculator Program	23-02-2021	
35	Tutorial	24-2-2021	
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-II	II Arrays, String, Enum, Structure, Unions		Denvery
To learn	o learn about the design concepts of arrays, strings, en about their usage. ogramming for Problem Solving, Behrouz A. Forouza	an, Richard F.Gilberg,	
	Concepts, Using Array in C	25,26-02-2021	
37	Array Application	27-02-2021	
38	Two Dimensional Arrays	27-02-2021	
39	Multidimensional Arrays	1-03-2021	
40	Programming Example – Calculate Averages	2-03-2021	
41	String Concepts, C String	4-03-2021	
42	String Input / Output Functions	6-03-2021	
43	Arrays of Strings	8-03-2021	
44	String Manipulation Functions	9-03-2021	
45	String/ Data Conversion	10-03-2021	
46	A Programming Example – Morse Code	11-03-2021	Lecture
47	The Type Definition (Type def)	12-03-2021	interspersed
48	Enumerated Types	12-03-2021	with
49	Structure	13-03-2021	J:
50	Unions	13-03-2021	discussions
51	Programming Application	13-03-2021	
52	Tutorial	14-03-2021	
UNIT-IV			
TB1: Proce	assimilate about pointers, dynamic memory allocationssor. Opgramming for Problem Solving, Behrouz A. Forouza		
10.01	TOPIC	Date	Mode of
Periods			Delivery
53	Introduction	22-03-2021	
54	Pointers to pointers	22-03-2021	
55	Compatibility, L value and R value	24-03-2021	
56	Arrays, and Pointers	26-03-2021	

57	Pointer Arithmetic and Arrays	27-03-2021	Lecture
58	Memory Allocation Function	30-03-2021	intersperse
59	Array of Pointers	31-03-2021	with
60	Programming Application	31-03-2021	discussion
61	Processor Commands	1-04-2024	
62	Tutorial	1-04-2021	
UNIT-V	Files and Functions		
CO5: T	o assimilate about File I/O and significance of func	tions.	
TB1: Pr	ogramming for Problem Solving, Behrouz A. Foro	uzan, Richard F.Gilberg.	CENGAGE
63	Files, Streams	15-04-2024	CLITORIGE
64	Standard Library Input / Output Functions	16-04-2024	
65	Formatting Input / Output Functions	16-04-2024	
66	Character Input / Output Functions	16-04-2024	
67	Text versus Binary Streams	17-04-2024	
68	Functions for Files	19-04-2024	
69	Converting File Type	20-04-2024	Lecture
70	Designing, Structured Programs	3-04-2024	intersperse
71	Function in C	5-04-2024	with
72	User Defined Functions	6-04-2024	discussions
73	Inter-Function Communication	7-04-2024	
74	Standard Functions	8-04-2024	
75	Passing Array to Functions	10-04-2024	
76	Passing Pointers to Functions	13-04-2024	
77 78	Recursion	13-04-2024	

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: 1R201110

Course Title: PRO	GRAMMING FOR PROBLEM SOLVING	USING C (ES1101)
Section : Sec B	Date: 08-01-2021	Page No: 01 of 03
Revision No: 00	Prepared By : B.S.S.TEJESH	Approved By : HOD

Tools: Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
program	Introduction to C language of learn about the computer systems, computing envious and Structure of a C Program. ogramming for Problem Solving, Behrouz A. Forouz		
1	Creating and running Programs	8/1/21	I
2	Computer Numbering System	9/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	Lecture
5	C Programs, Identifiers	19/1/21	Interspersed
6	Types, Variable	20/1/21	With
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	discussions
9	Scope	23/1/21	
10	Storage Classes	25/1/21	
11	Type Qualifiers	27/1/21	
12	Expressions Precedence	28/1/21	
13	Associativity	29/1/21	
14	Side Effects, Evaluating Expressions	30/1/21	
15	Type Conversion Statements	1/2/21	
16	Simple Programs	2/2/21	
17	Command Line Arguments	3/2/21	
18	Tutorial	4/2/21	
	Operators, Selection and Repetition gain knowledge of the operators, selection, control ogramming for Problem Solving, Behrouz A. Forous		
19	Exact Size Integer Types	5/2/21	
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	Lecture
23	Two Way Selection	10-12/2/21	interspersed
24	Multiway Selection	13/2/21	with
25	More Standard Functions	15/2/21	

26	Concept of Loop	16/2/21	discussions
27	Pretest and Post-test Loops	17/2/21	
28	Initialization and Updating	18/2/21	
29	Event and Counter Controlled Loops	19/2/21	
30	Loops in C	20/2/21	
31	Other Statements Related to Looping	22/2/21	
32	Looping Applications	23-25/2/21	
33	Programming Example		
35	Tutorial	26/2/21	
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-II	I Arrays, String, Enum, Structure, Unions		
CO3: To	learn about the design concepts of arrays, strings, enun	nerated structure and	union types.
	about their usage.		
	ogramming for Problem Solving, Behrouz A. Forouzan,	Richard F.Gilberg, C.	ENGAGE
36	Concepts, Using Array in C	27/2/21	
37	Array Application	1/3/21	
38	Two Dimensional Arrays	2/3/21	
39	Multidimensional Arrays	3/3/21	
		4/3/21	
40	Programming Example – Calculate Averages		
41	String Concepts, C String	5/3/21	
42	String Input / Output Functions	6-9/3/21	
43	Arrays of Strings	10/3/21	
44	String Manipulation Functions	11/3/21	
45	String/ Data Conversion	12/3/21	T
46	A Programming Example	13-15/3/21	Lecture
47	The Type Definition (Type def)	16/3/21	interspersed
48	Enumerated Types	17/3/21	with
49	Structure	18-20/3/21	discussions
50	Unions	22-25/3/21	discussions
51	Programming Application	26-31/3/21	
52	Tutorial		
UNIT-IV	V Pointers		
CO4: To	assimilate about pointers, dynamic memory allocation	and know the significa	ance of
Preproce	하는데 그리트 회원들은 항문 경험을 열심하다면 되는데 되었다면 얼마나 되었다면 되었다면 하는데		
TB1: Pro	ogramming for Problem Solving, Behrouz A. Forouzan,	Richard F.Gilberg, C	ENGAGE
No. of	TOPIC	Date	Mode of
Periods			Delivery
53	Introduction	1/4/21	
54	Pointers to pointers	2/4/21	
55	Compatibility, L value and R value	3/4/21	
		5/4/21	
56	Arrays, and Pointers	13/1/21	
56 57	Arrays, and Pointers Pointer Arithmetic and Arrays	6/4/21	Lecture

59	Array of Pointers	8/4/21	with
60	Programming Application	9/4/21	discussions
61	Processor Commands	10/4/21	
62	Tutorial		
UNIT-V	Files and Functions		
CO5: T	o assimilate about File I/O and significance of functions		
TB1: Pi	ogramming for Problem Solving, Behrouz A. Forouzan	, Richard F.Gilberg, C	CENGAGE
63	Designing, Structured Programs	12/4/21	
64	Function in C	13/4/21	
65	User Defined Functions	14/4/21	
66	Inter-Function Communication	15/4/21	
67	Standard Functions	16/4/21	
68	Passing Array to Functions	17/4/21	
69	Passing Pointers to Functions		
70	Recursion		Lecture interspersed
71	Passing an Array to Function	19/4/21	with
72	Files, Streams		discussions
73	Standard Library Input / Output Functions	20/4/21	
74	Formatting Input / Output Functions	21/4/21	
75	Character Input / Output Functions	22/4/21	
76	Text versus Binary Streams		
77	Functions for Files	23/4/21	
78	Converting File Type		
79	Tutorial	24/4/21	

Signature of Faculty

Janul Melas

	APPLIED CHEMISTRY	I D N	1.2
Section :ECE		Page No	
Revision No :0	0 Prepared By : B.SOWJANYA	Approve	ed By : HOD
Tools:	TONG	D. 4	M. J. CD.
No. of Periods		Date	Mode of Delivery
CO1: Importa	Unit – I: POLYMER TECHNO (Engineering Chemistry by Jain and Jain; Dhanpa nce of usage of plastics in household appliances an automotive industries.	t Rai Publicatir	
1	Polymerisation:- Introduction-methods of polymerization	8-1-2021	
2	physical and mechanical properties.	9-1-2021	
3	Plastics: Compounding-fabrication	12-1-2021	
4	preparation, properties and applications of PVC,	21-1-2021	
5	polycarbonates and Bakelite-mention some examples of plastic.	21-1-2021	Lecture
6	Materials used in electronic gadgets, recycling of e-plastic waste	22-1-2021	interspersed with
7	Elastomers:- Natural rubber-drawbacks- vulcanization	23-1-2021	discussions
8	preparation, properties and applications of synthetic rubbers	25-1-2021	Constant
9	(Buna S, thiokol and polyurethanes	27-1-2021	No.
10	Composite materials: Fiber reinforced plastics	28-1-2021	
11	conductingpolymers-	30-1-2021	i.
13	Biodegradable polymersbiopolymers	30-1-2021	
	Unit -II :ELECTROCHEMICAL CELLS AND (Engineering Chemistry by Jain and Jain; Dhanpa Itline the basics for the construction of electrochem Understand the mechanism of corrosion and hor	t Rai Publication icalcells, batte w it can be pre	ng Co.) eries and fuelcells.
1	Unit -II :ELECTROCHEMICAL CELLS		
2	Single electrode potentia.	4-2-2021	
3	Electrochemical series and uses of series	5-2-2021	
4	standard hydrogen electrode, calomel electrode	6-2-2021	T
5	concentration cell-	6-2-2021	Lecture
6	construction of glass electrode	8-2-2021	interspersed
7	Batteries: Dry cell, Ni-Cd cells,	9-2-2021	with
8	N-iMetal hydride cells, Li ion battery, zinc air cells	10-2-2021	discussions
9	Fuel cells: H2-O2, CH3OH-O2,	11-2-2021	
10	phosphoric acid, molten carbonate	12-2-2021	
11	Corrosion:-Definition-theories of corrosion	13-2-2021	

12	galvanic corrosion, differential aeration corrosion, stress corrosion,	15-2-2021	1 1741 00 10 10 10 10 10 10 10 10 10 10 10 10
13	waterline corrosion-passivity of metals- galvanicseries	16-2-2021	
14	Factors influencing rate of corrosion-corrosion control	17-2-2021	
15	Protective coatings: Surface preparation, cathodic	19-2-2021	
16	Anodic coatings, electroplating, electroless plating (nickel).	20-2-2021	
17	Paints (constituents, functions, special paints).	22-2-2021	

Unit - III: UNIT III: MATERIAL CHEMISTRY

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO3: Explain the preparation of semiconductors and nanomaterials, engineering applications of nanomaterials, superconductors and liquiderystals.

1	Part I: Non-elemental semiconducting materials	23-2-2021	
2	Semiconductor devices (p-n junction diode as rectifier, junction transistor	4-3-2021	
3	Insulators & magnetic materials: electrical insulators	8-3-2021	
4	Ferro and ferri magnetism-Hall effect and its applications.	10-3-2021	T
5	Part II: Nano materials:- Introduction-sol-gel method-	22-3-2021	Lecture interspersed
. 6	characterization by BET, SEM and TEM methods	23-2021	with
7	Applications of graphene-carbon nanotubes and fullerenes:	24-3-2021	discussions
8	Types, preparation and applications Liquid crystals	27-3-2021	
9	Introduction-types-applications. Super conductors:-Type –I, Type II-characteristics and applications.	30-3-2021	

UNIT IV: SPECTROSCOPIC TECHNIQUES & NON CONVENTIONAL ENERGY SOURCES

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO4: Recall the increase in demand for power and hence alternative sources of power are studied due to depleting sources of fossil fuels. Advanced instrumental techniques are introduced.

1.	Part A: SPECTROSCOPIC TECHNIQUES Electromagnetic spectrum-UV	1-4-2021	
2.	laws of absorption, instrumentation,	2-4-2021	
3	Theory of electronic spectroscopy, Frank-condon principle	3-4-2021	
4.	chromophores and auxochromes, intensity shifts, applications	5-4-2021	Lecture interspersed
5.	FT-IR (instrumentation and IR of some organic compounds, applications).	6-4-2021	with discussions
6.	Magnetic resonance imaging and CT scan (procedure	6-4-2021	

Service of production of the production	& applications).	a contract of the second	Service manager of the contract of the contrac
7.	Part B: NON CONVENTIONAL ENERGY SOURCES	7-4-2021	
8.	Design, working, schematic diagram, advantages and disadvantages of photovoltaic cell,	9-4-2021	
9.	Hydropower, geothermal power,	10-4-2021	
10.	Tidal and wave power	10-4-2021	
	UNIT V: ADVANCED CONCEPTS/TOPICS II	N CHEMISTRY	
	Applied Chemistry" by, Dr. Bharathi kumara Yal		
C05: Outline the	e basics of computational chemistry and molecular sy	vitches.	
1	Computational chemistry: Introduction, Ab Initio studies Molecular switches	11-4-2021	
2.	characteristics of molecular motors and machines, Rotaxanes	12-4-2021	Lecture
3.	Catenanes as artificial molecular machines, prototypes	15-4-2021	interspersed with
4.	linear motions in rotaxanes, an acid-base controlled molecular shuttle	16-4-2021	discussions
5.	a molecular elevator,	16-4-2021	
6.	an autonomous light-powered molecular motor	17-4-2021	
7.	Computational chemistry: Introduction, Ab Initio studies Molecular switches	17-4-2021	
8.	characteristics of molecular motors and machines,	17-4-2021	

HOD SIGNATURE



SRK INSTITUTE OF TECHNOLOGY ENIKEPADU, VIJAYAWADA 521108

Department Of Sciences And Humanities

SRKIT / S & H/12

TENTATIVE LESSON PLAN: R201115

Section : ECE	-B Date: 06-01-2021	Page No:	1-3
Revision No :00	Prepared By : Dr.T.V.Nagalakshmi	Approved	By: HOD
Tools:			
No. of Periods	TOPIC	Date	Mode of Delivery
	UNIT – I: POLYMER TECHNOLO		
	e different types of composite plastic materials an	nd interpret the r	nechanism of
conduction in co	onducting polymers		
1	Polymerisation:- Introduction-methods of	07-01-2021	
	polymerization		
2	Physical and mechanical properties.	08-01-2021	
3	Plastics: Compounding-fabrication	09-01-2021	
4	Preparation, properties and applications of PVC,	11-01-2021	
5	Polycarbonates and Bakelite-mention some examples of plastic.	12-01-2021	Lecture
6	Materials used in electronic gadgets, recycling of e-plastic waste	12-01-2021	Interspersed With
7	Elastomers:- Natural rubber-drawbacks- vulcanization	18-01-2021	Discussions
8	Preparation, properties and applications of synthetic rubbers	19-01-2021	- 147
9	(Buna S, thiokol and polyurethanes	19-01-2021	
10	Composite materials: Fiber reinforced plastics-	19-01-2021	
11	Conducting polymers-	21-01-2021	
12	Biodegradable polymers biopolymers	22-01-2021	
13	Biomedical polymers	23-01-2021	

UNIT-II :ELECTROCHEMICAL CELLS AND CORROSION

CO: Utilize the theory of construction of electrodes, batteries and fuel cells in redesigning new engineering products and categorize the reasons for corrosion and study methods to control corrosion

1	Single electrode potentia.	23-01-2021	
2	Electrochemical series and uses of series	25-01-2021	Lecture



SRK INSTITUTE OF TECHNOLOGY ENIKEPADU, VIJAYAWADA 521108

SRKIT / S & H/12

Department Of Sciences And Humanities

3	Standard hydrogen electrode, calomel electrode	28-01-2021	Interspersed
4		29-01-2021	With
5	Concentration cell-	30-01-2021	Discussions
6	Construction of glass electrode	30-01-2021	
7	Batteries: Dry cell, Ni-Cd cells,	01-02-2021	
8	Ni Metal hydride cells, Li ion battery, zinc air cells	02-02-2021	
9	Fuel cells: H ₂ -O ₂ , CH ₃ OH-O ₂ ,	02-02-2021	
10	Phosphoric acid, molten carbonate	05-02-2021	
11	Corrosion:-Definition-theories of corrosion	06-02-2021	
12	Galvanic corrosion, differential aeration corrosion, stress corrosion,	06-02-2021	
13	Waterline corrosion-passivity of metals-galvanic series	08-02-2021	Lecture
14	Factors influencing rate of corrosion-corrosion control	09-02-2021	Interspersed With
15	Protective coatings: Surface preparation, cathodic	09-02-2021	Discussions
16	Anodic coatings, electroplating, electroless plating (nickel).	11-02-2021	
17	Paints (constituents, functions, special paints).	11-02-2021	

Unit - III UNIT III: MATERIAL CHEMISTRY

COs:

• Synthesize nanomaterials for modern advances of engineering technology.

• Summarize the preparation of semiconductors; analyze the applications of liquid crystals and superconductors.

1	Part I : Non-elemental semiconducting materials	12-02-2021	
2	Semiconductor devices (p-n junction diode as rectifier, junction transistor	13-02-2021	
3	Insulators & magnetic materials: electrical insulators	13-02-2021	
4	Ferro and ferri magnetism-Hall effect and its applications.	15-02-2021	Lecture
5	Part II: Nano materials:- Introduction-sol-gel method-	16-02-2021	Interspersed With
6	Characterization by BET, SEM and TEM methods	16-02-2021	Discussions
7	Applications of graphene-carbon nanotubes and fullerenes:	18-02-2021	
8	Types, preparation and applications Liquid	19-02-2021	



SRK INSTITUTE OF TECHNOLOGY ENIKEPADU, VIJAYAWADA 521108

SRKIT / S & H/12

Department Of Sciences And Humanities

VIJAYAWADA	
	crystals
9	Introduction-types-applications. Super conductors:-Type –I, Type II-characteristics and applications.
UNIT IV: SI SOURCES Cos:	PECTROSCOPIC TECHNIQUES & NON CONVENTIONAL ENERGY
	Analyze the principles of different analytical instruments and their applications. Design models for energy by different natural sources.

1.	Part A: SPECTROSCOPIC TECHNIQUES	01-03-2021	
	Electromagnetic spectrum-UV		
2.	Laws of absorption, instrumentation,	02-03-2021	
3	Theory of electronic spectroscopy, Frank-Condon principle	05-03-2021	
4.	Chromophores and auxochromes, intensity shifts, applications	06-03-2021	
5.	FT-IR (instrumentation and IR of some organic compounds, applications).	08-03-2021	Lecture Interspersed
6.	Magnetic resonance imaging and CT scan (procedure & applications).	09-03-2021	With Discussions
7.	Part B: NON CONVENTIONAL ENERGY SOURCES	11-03-2021	
8.	Design, working, schematic diagram, advantages and disadvantages of photovoltaic cell,	12-03-2021	
9.	Hydropower, geothermal power,	13-03-2021	
10.	Tidal and wave power	13-03-2021	
	UNIT V: ADVANCED CONCEPTS/TOPICS IN C		
COs: Obta	ain the knowledge of computational chemistry and mole		S
1	Computational chemistry: Introduction, Molecular modeling and docking	20-03-2021	
2.	Characteristics of molecular motors and machines, Rotaxanes	23-03-2021	
3.	Catenanes as artificial molecular machines,	27-03-2021	
4.	Linear motions in rotaxanes	30-03-2021	Lecture
5.	A molecular elevator	02-04-2021	Interspersed
6.	An autonomous light-powered molecular motor	02-03-2021	With
7.	Prototypes and molecular switches	01-03-2021	Discussions
8.	Acid-base controlled molecular shuttle	02-03-2021	

FACULTY SIGNATURE

HOD SIGNATURE

TENTATIVE LESSON PLAN: R201101

Section : CSM	Date: 04-01-2021	Page No	: 01 of 02
Revision No : 00	O Prepared By: S.SUMAN		d By: HOD
Tools: Black bo			
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize me: TB:" Engineeri	ENCES, SERIES AND MEAN VALUE THEOR an value theorems to real life problems ng Mathematics", Dr. T.K.V.Iyengar; S.Chand p		
1	SEQUENCES AND SERIES: Convergence and Divergence		
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series		*intersperse
7	Leibnitz 's rule	To:	with
8	Mean Value Theorems: Rolle 's Theorem	23-01-2021	discussions
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
	Taylor 's and Maclaurin 's theorems with		
10 11 UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND		GREE
10 11 UNIT-II DIF CO2: Solve the	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer ag Mathematics", Dr. T.K.V.Iyengar; S.Chand put	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer of Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	GREE Lecture
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations — Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation	ing fields blications From:	Lecture
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse with
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture intersperse with
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer as Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse
10 11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture intersperse with

	eering Mathematics", Dr. T.K.V.Iyengar; S.Cha	and publications	professional state of the profession and
24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	& E	with
30	Q(x) = xV(x)	From: 22-02-2021	discussions
31	$Q(x) = x^n \sin ax \text{ or } \cos ax$ Method of variation of parameters	To:	
32	Method of variation of parameters Applications: LCR Circuit		
	Applications. LCR circuit	06-03-2021	
33	Simple Harmonic Motion		
34	ering Mathematics", Dr. T.K.V.Iyengar; S.Char Homogeneous function; Euler's Theorem	nd publications	
34	Homogeneous function; Euler's Theorem	- p = 5 iven tions	
35	Total Derivative; Chain rule	From:	
36	Taylor's mean value theorems	08-03-2021	Lecture
37	Maclaurin's series		interspersed
38	Jacobians, formulae	To:	with
39	Functional dependence	27-03-2021	discussions
40	Maxima minima of two variables		
	Langranges method		and the state of
41	Langranges memod		
	LTIPLE INTEGRALS		
JNIT-V: MU	LTIPLE INTEGRALS double integration techniques in evaluating area	as bounded by regi	on
NIT-V: MU	LTIPLE INTEGRALS	as bounded by regi	on
NIT-V: MU O5: Apply B:" Engine	LTIPLE INTEGRALS double integration techniques in evaluating area ering Mathematics", Dr. T.K.V.Iyengar; S.Chan	d publications	on
NIT-V: MU CO5: Apply B:" Engine	double integration techniques in evaluating area ering Mathematics", Dr. T.K.V.Iyengar; S.Chan Introduction	From: 29-03-2021.	Lecture
NIT-V: MU O5: Apply B:" Engine 42 43	double integration techniques in evaluating area ering Mathematics", Dr. T.K.V.Iyengar; S.Chan Introduction Double integrals	d publications From:	Lecture interspersed
ONIT-V: MUCO5: Apply B:" Engine 42 43 44	double integration techniques in evaluating area ering Mathematics", Dr. T.K.V.Iyengar; S.Chan Introduction Double integrals Triple integrals	From: 29-03-2021.	Lecture
UNIT-V: MU CO5: Apply B:" Engine 42 43 44 45	double integration techniques in evaluating area ering Mathematics", Dr. T.K.V.Iyengar; S.Chan Introduction Double integrals Triple integrals Change of order of integration	From: 29-03-2021. To:	Lecture interspersed with

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R201102

	COMMUNICATIVE ENGLISH	D N	a + 01 af 02
Section : CSM			o: 01 of 03
Revision No : 0		Approv	ed By: HOD
Tools: Black bo		Doto	Madaas
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT 1. A Dro	wer full of happiness, Deliverance by Premcha	nd	Benvery
	effective listening skills for better comprehens		lectures and
	by native speakers	ion of academic	rectures and
	English, Maruthi Publications, —The Individual So	ciety , Pearson P	ublications
1	A Drawer full of happiness	08-01-21	
2	Listening : Short Audio Texts	08-01-21	
_		00.01.01	
3	Speaking: Asking and answering questions	. 08-01-21	
4	Reading: Skimming and Scanning	19-01-21	Lecture
	Reading . Skimming and Seaming	15-01-21	interspersed with
5	Reading for Writing: Paragraph writing	19-01-21	discussions
			discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
			4
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	·Long Answers	25-01-21	
10	Short Answers	27-01-21	
	's letter to his daughter Indira on her birthday, Bos		
and authentic i	appropriate reading strategies for comprehens	sion of various	academic texts
	dish, Maruthi Publications, —The Individual Societ	n Doorson Dubl	ications
	Nehru's letter to his daughter Indira on her	ly 1, Tearson Tubi	ications
12	birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16	Reading for Writing: Summarizing	03-02-21	with discussions
17	Vocabulary: Technical vocabulary	04-02-21	alseassions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture interspersed
26	Speaking: Discussing specific topics in pairs	16-02-21	with
27	Reading: Reading a text in detail	17-02-21	discussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information. TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

English	The second of the second of	discussions
Reading: Studying the use of graphic elements	08-03-21	
Reading for Writing: Information transfer	10-03-21	
Vocabulary: Technical vocabulary	22-03-21	
Grammar: Quantifying expressions	24-03-21	
Telephone Conversation: Wole Soyinka	26-03-21	
	Reading: Studying the use of graphic elements Reading for Writing: Information transfer Vocabulary: Technical vocabulary Grammar: Quantifying expressions	Reading: Studying the use of graphic elements 08-03-21 Reading for Writing: Information transfer 10-03-21 Vocabulary: Technical vocabulary 22-03-21 Grammar: Quantifying expressions 24-03-21

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

English, Maruthi Publications, —The Individual Society	yl, Pearson Pub	lications
Stay Hungry-Stay foolish	30-03-21	
Listening Identifying key terms	01-04-21	Lecture
Speaking: Formal oral presentations	05-04-21	with discussions
Reading: Reading for comprehension	08-04-21	
Reading for Writing: Writing academic proposals	09-04-21	
Vocabulary: Technical vocabulary	10-04-21	
Grammar: Editing short texts	12-04-21	
	Stay Hungry-Stay foolish Listening Identifying key terms Speaking: Formal oral presentations Reading: Reading for comprehension Reading for Writing: Writing academic proposals Vocabulary: Technical vocabulary	Listening Identifying key terms O1-04-21 Speaking: Formal oral presentations O5-04-21 Reading: Reading for comprehension Reading for Writing: Writing academic proposals Vocabulary: Technical vocabulary 10-04-21

Signature of Faculty

Signature of HOD



S.R.K INSTITUTE OF TECHNOLOGY

Enikepadu, Vijayawada 521108 Approved by AICTE, Affiliated to JNTUK, Kakinada (ISO 9001:2015 Certified Institution) DEPARTMENT OF SCIENCE AND HUMANITIES

TENTATIVE LESSON PLAN (R201110)

		RAMMING FOR PROBLEM SOLVING		1 - 602
	Sec CSM	Date: 8/1/2021	Page No: 01 of 03	
Revision I		Prepared By : Dr.B.Asha Latha PPTs, Moodle	Approved By : HOD	
	ick Doard, I			1
No. of		TOPIC	Date	Mode of
Periods UNIT-I	I.4 J.	uction to C language		Delivery
CO1: To program a	learn about and Structur	the computer systems, computing environment of a C Program. or Problem Solving, Behrouz A. Forouzan,		
	Computer Sy			
2	Computing I	Environments		
	Computer la	0 0		
		I running Programs		Lecture
		umbering System		Interspersed
	Storing Integ			With
	Storing Real		0.1.21	discussions
	C Programs,		8-1-21	
9	Types, Varia		То	
	Constants, In		10	
11	Programmin	g Examples	23-1-21	
12	Scope, Stora	ge Classes and Type Qualifiers	25-1-21	
13	Expressions	Precedence and Associativity		
14	Side Effects.	, Evaluating Expressions		
15	Type Conve	rsion Statements		
16	Simple Prog	rams		
17	Command L	ine Arguments		
18	Tutorial			
UNIT-II	Opera	tors, Selection and Repetition		
The state of the s	•	dge of the operators, selection, control state or Problem Solving, Behrouz A. Forouzan,		
19	Exact Size I	nteger Types	25-1-21	
1/				
20	Logical Bity	vise Operators		

24	Multiway Selection		interspersed
25	More Standard Functions		with
26	Concept of Loop		discussions
27	Pretest and Post-test Loops		
28	Initialization and Updating		
29	Event and Counter Controlled Loops		
30	Loops in C		
31	Other Statements Related to Looping		
32	Looping Applications		
33	Programming Example The Calculator Program		
35	Tutorial		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I	II Arrays, String, Enum, Structure, Unions		Delivery
10 learn	o learn about the design concepts of arrays, strings, end about their usage. ogramming for Problem Solving, Behrouz A. Forouzal Concepts, Using Array in C		
37			
38	Array Application Two Dimensional Arrays		
39			
40	Multidimensional Arrays		
	Programming Example – Calculate Averages		
41	String Concepts, C String	15-2-21	
43	String Input / Output Functions	То	
44	Arrays of Strings	10	
45	String Manipulation Functions String/ Data Conversion		
46			Lootuus
47	A Programming Example – Morse Code	30-2-21	Lecture interspersed
48	The Type Definition (Type def)		with
49	Enumerated Types Structure		
50	Unions		discussions
51			
52	Programming Application Tutorial		
- A. C.			
UNIT-IV			
rreproce	assimilate about pointers, dynamic memory allocation ssor. ogramming for Problem Solving, Behrouz A. Forouzan		
No. of	TOPIC		
Periods	20110	Date	Mode of
53	Introduction		Delivery
54	Pointers to pointers		
55	Compatibility, L value and R value		
56	Arrays, and Pointers		

57	Pointer Arithmetic and Arrays	1-3-21	Lastre
58	Memory Allocation Function	1-3-21	Lecture interspersed
59	Array of Pointers	To	with
60	Programming Application		discussions
61	Processor Commands	15-3-21	
62	Tutorial		
UNIT-V	Files and Functions		
CO5: T	o assimilate about File I/O and significance of functions		
IRI: L	rogramming for Problem Solving, Behrouz A. Forouzar	1. Richard F.Gilberg Cl	ENCACE
63	Files, Streams	-, radiatu 1. Gliberg, Ci	LINGAGE
64	Standard Library Input / Output Functions		
65	Formatting Input / Output Functions		
66	Character Input / Output Functions	16-3-21	
67	Text versus Binary Streams		
68	Functions for Files		
69	Converting File Type	To	
70	Designing, Structured Programs		Lecture
71	Function in C	5-4-21	interspersed
72	User Defined Functions		with
73	Inter-Function Communication		discussions
74	Standard Functions		
75	Passing Array to Functions		
76	Passing Pointers to Functions		
77	Recursion		
78	Passing an Array to Function		
79	Tutorial		

Signature of Faculty

Mulling Si

Signature of HOL

Section :CSM	Date: 8-1-2021	Page No	: 1-3
Revision No :00	Prepared By : B.SOWJANYA	Approve	ed By : HOD
Tools:			
No. of Periods:7	1 TOPIC	Date	Mode of Delivery
	Unit – I: POLYMER TECHNO	LOGY	
	(Engineering Chemistry by Jain and Jain; Dhanpa		
CO1: Importance	e of usage of plastics in household appliances an	d composites(FRP) in aerospace and
	automotive industries.		
. 1	Polymerisation:- Introduction-methods of	8-1-2021	
	polymerization		
2	physical and mechanical properties.	12-1-2021	
3	Plastics: Compounding-fabrication	17-1-2021	
4	preparation, properties and applications of PVC,	19-1-2021	
5	polycarbonates and Bakelite-mention some	20-1-2021	
	examples of plastic.		Lecture
6	Materials used in electronic gadgets, recycling of	21-1-2021	interspersed
	e-plastic waste		with
7	Elastomers:- Natural rubber-drawbacks-	23-1-2021	discussions
	vulcanization		
8	preparation, properties and applications of	27-1-2021	
	synthetic rubbers		
9	(Buna S, thiokol and polyurethanes	28-1-2021	
10	Composite materials: Fiber reinforced plastics	30-1-2021	
11	conductingpolymers-	2-2-2021	
13	Diada wa dahla wah wasanki a sah wasan	2 2 2021	
13	Biodegradable polymersbiopolymers	3-2-2021	
	Unit -II :ELECTROCHEMICAL CELLS AND	CORROSIO	N
	(Engineering Chemistry by Jain and Jain; Dhanpa		
	ne the basics for the construction of electrochem		
	Understand the mechanism of corrosion and how	w it can be pre-	vented.
1	Unit -II :ELECTROCHEMICAL CELLS	6-2-2021	
2	Single electrode potentia.	6-2-2021	
3	Electrochemical series and uses of series	8-2-2021	
4	standard hydrogen electrode, calomel electrode	9-2-2021	
5	concentration cell-	9-2-2021	Lecture
6	construction of glass electrode	10-2-2021	interspersed
7	Batteries: Dry cell, Ni-Cd cells,	11-2-2021	with
8	N-iMetal hydride cells, Li ion battery, zinc air cells	13-2-2021	discussions
9	Fuel cells: H2-O2, CH3OH-O2,	15-2-2021	

10	phosphoric acid, molten carbonate	18-2-2021	The second section of the second seco
11	Corrosion:-Definition-theories of corrosion	17-2-2021	
12	galvanic corrosion, differential aeration corrosion, stress corrosion,	20-2-2021	
13	waterline corrosion-passivity of metals- galvanicseries	22-2-2021	
14	Factors influencing rate of corrosion-corrosion control	23-2-2021	
15	Protective coatings: Surface preparation, cathodic	24-2-2021	
16	Anodic coatings, electroplating, electroless plating (nickel).	25-2-2021	
17	Paints (constituents, functions, special paints).	25-2-2021	

Unit - III: UNIT III: MATERIAL CHEMISTRY

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO3: Explain the preparation of semiconductors and nanomaterials, engineering applications of

nanomaterials, superconductors and liquidcrystals.

1	Part I: Non-elemental semiconducting materials	26-2-2021	
2	Semiconductor devices (p-n junction diode as rectifier, junction transistor	6-3-2021	
3	Insulators & magnetic materials: electrical insulators	9-3-2021	
4	Ferro and ferri magnetism-Hall effect and its applications.	13-3-2021	
. 5	Part II: Nano materials:- Introduction-sol-gel method-	23-3-2021	Lecture interspersed
6	characterization by BET, SEM and TEM methods	23-2021	with
7	Applications of graphene-carbon nanotubes and fullerenes:	24-3-2021	discussions
8	Types, preparation and applications Liquid crystals	25-3-2021	
9	Introduction-types-applications. Super conductors:-Type –I, Type II-characteristics and applications.	27-3-2021	

UNIT IV: SPECTROSCOPIC TECHNIQUES & NON CONVENTIONAL ENERGY SOURCES

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO4: Recall the increase in demand for power and hence alternative sources of power are studied due to depleting sources of fossil fuels. Advanced instrumental techniques are introduced.

1.	Part A: SPECTROSCOPIC TECHNIQUES	27-3-2021	
	Electromagnetic spectrum-UV		
2.	laws of absorption, instrumentation,	30-3-2021	
3	Theory of electronic spectroscopy, Frank-condon principle	30-3-2021	
4.	chromophores and auxochromes, intensity shifts, applications	30-3-2021	Lecture

5.	FT-IR (instrumentation and IR of some organic compounds, applications).	1-4-2021	interspersed with
6.	Magnetic resonance imaging and CT scan (procedure & applications).	1-4-2021	discussions
7.	Part B: NON CONVENTIONAL ENERGY SOURCES	25-3-2021	
8.	Design, working, schematic diagram, advantages and disadvantages of photovoltaic cell,	25-3-2021	
9.	Hydropower, geothermal power,	27-3-2021	
10.	Tidal and wave power	27-3-2021	
CO5: Outline th	Applied Chemistry" by, Dr. Bharathi kumara Ya ne basics of computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio	witches.	·
C05: Outline th			•
1			•
CO5: Outline the	e basics of computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio	witches.	Lecture
1	characteristics of molecular switches characteristics of molecular motors and machines,	vitches. 1-4-2021	Lecture interspersed
2.	Computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio studies Molecular switches characteristics of molecular motors and machines, Rotaxanes Catenanes as artificial molecular machines,	vitches. 1-4-2021 1-4-2021	Lecture
2. 3.	Computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio studies Molecular switches characteristics of molecular motors and machines, Rotaxanes Catenanes as artificial molecular machines, prototypes linear motions in rotaxanes, an acid-base controlled	vitches. 1-4-2021 1-4-2021 3-4-2021	Lecture interspersed with
2. 3. 4.	computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio studies Molecular switches characteristics of molecular motors and machines, Rotaxanes Catenanes as artificial molecular machines, prototypes linear motions in rotaxanes, an acid-base controlled molecular shuttle	vitches. 1-4-2021 1-4-2021 3-4-2021 3-4-2021	Lecture interspersed with
1 2. 3. 4. 5.	computational chemistry and molecular sy Computational chemistry: Introduction, Ab Initio studies Molecular switches characteristics of molecular motors and machines, Rotaxanes Catenanes as artificial molecular machines, prototypes linear motions in rotaxanes, an acid-base controlled molecular shuttle a molecular elevator,	vitches. 1-4-2021 1-4-2021 3-4-2021 5-4-2021	Lecture interspersed with

B. Sowjanya FACULTY SIGNATURE

HOD SIGNATURE

Section : CS D	IATHEMATICS – 1 Date: 04-01-2021	Page No	:01 of 02
Revision No : 00	Prepared By : S.KALPANA		ed By : HOD
Tools: Black bo			•
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize mea	ENCES, SERIES AND MEAN VALUE THEORY an value theorems to real life problems ng Mathematics", Dr. T.K.V.Iyengar; S.Chand pu SEQUENCES AND SERIES:		
	Convergence and Divergence		
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series	Τ.	intersperse
7	Leibnitz 's rule	To:	with
8	Mean Value Theorems: Rolle 's Theorem	23-01-2021	discussions
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11 UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND		GREE
UNIT-II DIF CO2: Solve the	Taylor 's and Maclaurin 's theorems with remainders	ing fields	GREE
UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANI differential equations related to various engineer	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree	ing fields	GREE
UNIT-II DIF CO2: Solve the FB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields blications From:	FREE
UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	From: 25-01-2021	Lecture
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	Lecture intersperse
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation	From: 25-01-2021 To:	Lecture interspersed with
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture interspersed with
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021 To:	Lecture interspersed with
11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021 To:	Lecture interspersed

	the differential equations related to various engine eering Mathematics", Dr. T.K.V.Iyengar; S.Chano		
24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x)$, $Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From:	discussions
30	$Q(x) = x^n \sin ax \ or \cos ax$	22-02-2021 To:	
32	Method of variation of parameters		
32	Applications: LCR Circuit	06-03-2021	
33	Simple Harmonic Motion		
NIT-IV	PARTIAL DIFFERENTIATION		
CO4: Famili	rize with functions of several variables which is us	aful in antimica	
B:" Engine	ering Mathematics", Dr. T.K.V.Iyengar; S.Chand	publications	HOU
34	Homogeneous function; Euler's Theorem	P-siled crons	
35	Total Derivative; Chain rule	T .	
36	Taylor's mean value theorems	From: 08-03-2021	_
37	Maclaurin's series	_	Lecture interspersed
38	Jacobians, formulae	To:	with
39	Functional dependence	27-03-2021	discussions
40	Maxima minima of two variables	\exists	
41	Langranges method		
NIT-V: MU	LTIPLE INTEGRALS		
O5: Apply	double integration techniques in evaluating areas l	ounded by regi	on
B:" Enginee	ring Mathematics", Dr. T.K.V.Iyengar; S.Chand	oublications	
42	Introduction	From:	
43	Double integrals	29-03-2021.	
44	Triple integrals	To:	Lecture
45	Change of order of integration	10:	interspersed with
46	Change of variable	12-04-2021	discussions
47	Applications: Finding areas		
48	Finding volumes		

S. Kalpana Signature of Faculty Signature of HOD

Section : CSD	Date: 08-01-2021	Page N	o:01 of 03
Revision No: 00	Prepared By: Dr.A.Padmaja	Appro	ved By: HOD
Tools: Black bo	ard		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-1: A Dra	wer full of happiness, Deliverance by Premcha	nd	
CO1: Facilitate	effective listening skills for better comprehens	ion of academic	e lectures and
English spoken	by native speakers		
TB: —Infotech E	nglish, Maruthi Publications, —The Individual So		ublications
1	A Drawer full of happiness	08-01-21	
2	Listening: Short Audio Texts	08-01-21	
3	Speaking: Asking and answering questions	08-01-21	Lecture
4	Reading: Skimming and Scanning	19-01-21	interspersed
5	Reading for Writing: Paragraph writing	19-01-21	with discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance: Munshi Prem Chand	21-01-21	
9	Long Answers	25-01-21	
10	Short Answers	27-01-21	
CO2: Focus on and authentic n TB: Infotech Engl	ish, Maruthi Publications, —The Individual Societ	sion of various	academic text
	Nehru's letter to his daughter Indira on her birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16	Reading for Writing: Summarizing	03-02-21	with
17	Vocabulary: Technical vocabulary	04-02-21	discussions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications Stephen Hawking-Positivity 'Benchmark 11-02-21 25 Listening: Listening for global comprehension 15-02-21 Lecture interspersed Speaking: Discussing specific topics in pairs 26 16-02-21 with discussions 27 Reading: Reading a text in detail 17-02-21 28 Reading for Writing: Summarizing 19-02-21 Vocabulary: Technical vocabulary 29 22-02-21 30 Grammar: Verbs - tenses; subject-verb agreement 22-02-21 31 Shakespeare's Sister by Virginia Woolf 24-02-21 32 Long Answers 26-02-21

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English Maruthi Publications — The Individual Society Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

	1 (1979) (1 (1971) (1 (197	discussions
Reading: Studying the use of graphic elements	08-03-21	
Reading for Writing: Information transfer	10-03-21	
Vocabulary: Technical vocabulary	22-03-21	
Grammar: Quantifying expressions	24-03-21	
Telephone Conversation: Wole Soyinka	26-03-21	
	Reading: Studying the use of graphic elements Reading for Writing: Information transfer Vocabulary: Technical vocabulary Grammar: Quantifying expressions	Reading: Studying the use of graphic elements 08-03-21 Reading for Writing: Information transfer 10-03-21 Vocabulary: Technical vocabulary 22-03-21 Grammar: Quantifying expressions 24-03-21

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture interspers
43	Speaking: Formal oral presentations	05-04-21	with discussion
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	

Signature of Faculty 21

PRINCIPAL

Signature of HOD



S.R.K INSTITUTE OF TECHNOLOGY

Enikepadu, Vijayawada 521108
Approved by AICTE, Affiliated to JNTUK, Kakinada (ISO 9001:2015 Certified Institution)
DEPARTMENT OF SCIENCE AND HUMANITIES

Course T	Title: PROGRAMMING FOR PROBLEM SOLVING U	JSING C (ES1201)	
	: Sec CSD Date : 8/1/2021	Page No: 01	of 03
Revision		Approved By	y: HOD
Tools: B	lack board, PPTs, Moodle		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I	Introduction to C language		
CO1: To	learn about the computer systems, computing environm	nents, developing of a	computer
	and Structure of a C Program.		ENGAGE
1B1: Pro	ogramming for Problem Solving, Behrouz A. Forouzan,	Richard F.Gilberg, C.	ENGAGE
1	Computer Systems		T
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		Lecture
5	Computer Numbering System		Interspersed
6	Storing Integers		With
7	Storing Real Numbers		
8	C Programs, Identifiers	8-1-21	discussions
9	Types, Variable		
10	Constants, Input/output	То	
11	Programming Examples	22.1.21	
12	Scope, Storage Classes and Type Qualifiers	23-1-21	
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	Tutorial		
UNIT-II	Operators, Selection and Repetition		
CO2: To	gain knowledge of the operators, selection, control state	ments and repetition	in C.
	ogramming for Problem Solving, Behrouz A. Forouzan,		
19	Exact Size Integer Types	25-1-21	I
20	Logical Bitwise Operators	23-1-21	
21	Shift Operators	То	

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA

UNIT-IV

Pointers

S.R.K INSTITUTE OF TECHNOLOGY

Enikepadu, Vijayawada 521108 Approved by AICTE, Affiliated to JNTUK, Kakinada (ISO 9001:2015 Certified Institution) DEPARTMENT OF SCIENCE AND HUMANITIES

22	Logical Data and Operators	15-2-2	21	
23	Two Way Selection			Lecture
24	Multiway Selection			interspersed
25	More Standard Functions			with
26	Concept of Loop	Ter Delice de la constant		discussions
27	Pretest and Post-test Loops			
28	Initialization and Updating			
29	Event and Counter Controlled Loops			
30	Loops in C			
31	Other Statements Related to Looping			
32	Looping Applications			
33	Programming Example The Calculator Program			
35	Tutorial			
No. of	TOPIC	Da	ate	Mode of
Periods				Delivery
To learn	learn about the design concepts of arrays, strings, enunabout their usage.			
CO3: To	learn about the design concepts of arrays, strings, enum	nerated structur	re and	union types.
CO3: To To learn TB1: Pro	p learn about the design concepts of arrays, strings, enumabout their usage. Ogramming for Problem Solving, Behrouz A. Forouzan,			
CO3: To To learn	learn about the design concepts of arrays, strings, enum			
CO3: To To learn TB1: Pro 36	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application			
CO3: To To learn TB1: Pro	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays			
CO3: To To learn TB1: Pro 36	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application			
CO3: To learn TB1: Pro	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays			
CO3: To learn TB1: Pro 36 37 38 39	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays		erg, C	
CO3: To learn TB1: Pro 36 37 38 39 40	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages	Richard F.Gilbo	erg, C	
CO3: To learn TB1: Pro 36 37 38 39 40 41	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String	Richard F.Gilbe	erg, C	
CO3: To learn TB1: Pro 36 37 38 39 40 41 42	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions	Richard F.Gilbo	erg, C	
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43	o learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings	Richard F.Gilbe	erg, C	
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions	Richard F.Gilbe	erg, C	ENGAGE Lecture
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion	Richard F.Gilbe	erg, C	Lecture interspersed
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45 46	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion A Programming Example – Morse Code	Richard F.Gilbe	erg, C	ENGAGE Lecture
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45 46 47	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion A Programming Example – Morse Code The Type Definition (Type def)	Richard F.Gilbe	erg, C	Lecture interspersed with
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45 46 47 48	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion A Programming Example – Morse Code The Type Definition (Type def) Enumerated Types	Richard F.Gilbe	erg, C	Lecture interspersed
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45 46 47 48 49	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion A Programming Example – Morse Code The Type Definition (Type def) Enumerated Types Structure	Richard F.Gilbe	erg, C	Lecture interspersed with
CO3: To learn TB1: Pro 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C Array Application Two Dimensional Arrays Multidimensional Arrays Programming Example – Calculate Averages String Concepts, C String String Input / Output Functions Arrays of Strings String Manipulation Functions String/ Data Conversion A Programming Example – Morse Code The Type Definition (Type def) Enumerated Types Structure Unions	Richard F.Gilbe	erg, C	Lecture interspersed with

CO4: To assimilate about pointers, dynamic memory allocation and know the significance of



S.R.K INSTITUTE OF TECHNOLOGY

Enikepadu, Vijayawada 521108 Approved by AICTE, Affiliated to JNTUK, Kakinada (ISO 9001:2015 Certified Institution) DEPARTMENT OF SCIENCE AND HUMANITIES

No. of Periods	ogramming for Problem Solving, Behrouz A. Forouz TOPIC	Date	Mode of Delivery
53	Introduction		
54	Pointers to pointers		
55	Compatibility, L value and R value	1.2.21	
56	Arrays, and Pointers	1-3-21	Tastana
57	Pointer Arithmetic and Arrays	То	Lecture intersperse
58	Memory Allocation Function		with
59	Array of Pointers	15-3-21	discussions
60	Programming Application		
61	Processor Commands		
62	Tutorial		
UNIT-V	Files and Functions		
TB1: Pro	assimilate about File I/O and significance of function ogramming for Problem Solving, Behrouz A. Forouz		CENGAGE
63	Files, Streams		
64	Standard Library Input / Output Functions		
65	Formatting Input / Output Functions	16-3-21	
66	Character Input / Output Functions		
67	Text versus Binary Streams		
68	Functions for Files	To	
69	Converting File Type		Lecture
70	Designing, Structured Programs Function in C	5-4-21	intersperse
71	User Defined Functions	3-4-21	with
72	Inter-Function Communication		discussion
73			
74	Standard Functions		
75	Passing Array to Functions		
76	Passing Pointers to Functions Recursion		
77 78	Passing an Array to Function		
	LIACCING ON A MOTI TO LINGTION		

Signature of Faculty

Tutorial

79

PRINCIPAL

SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 198 Signature of HOD

Section: CSD	Date :8-01-2021	Page No	:1-3
Revision No :00	Prepared By: G.L.SARVANI	Approve	ed By: HOD
Tools: Black board	, PPTS		
No. of Periods:75	TOPIC	Date	Mode of Delivery

Unit – I: POLYMER TECHNOLOGY

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO1: Importance of usage of plastics in household appliances and composites(FRP) in aerospace and automotive industries.

1	Polymerization:- Introduction-methods of polymerization	08-1-2021	
2	physical and mechanical properties.	12-1-2021	
3	Plastics: Compounding-fabrication	19-1-2021	
4	preparation, properties and applications of PVC,	21-1-2021	
5	polycarbonates and Bakelite-mention some examples of plastic.	22-1-2021	
6	Materials used in electronic gadgets, recycling of e-plastic waste	23-1-2021	Lecture interspersed
7	Elastomers:- Natural rubber-drawbacks- vulcanization	25-1-2021	with discussions
8	preparation, properties and applications of synthetic rubbers	27-1-2021	
9	(Buna S, thiokol and polyurethanes	27-1-2021	
10	Composite materials: Fiber reinforced plastics	28-1-2021	
11	conductingpolymers-	29-1-2021	
12	Biodegradable polymers biopolymers	30-1-2021	
13	Biomedical polymers	30-1-2021	

Unit -II :ELECTROCHEMICAL CELLS AND CORROSION

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO2: Outline the basics for the construction of electrochemicalcells, batteries and fuelcells.

Understand the mechanism of corrosion and how it can be prevented

1	Unit -II :ELECTROCHEMICAL CELLS	02-2-2021	
2	Single electrode potentia.	02-2-2021	3
3	Electrochemical series and uses of series	02-2-2021	
4	standard hydrogen electrode, calomel electrode	03-2-2021	
5	concentration cell-	03-2-2021	Lecture
6	construction of glass electrode	03-2-2021	interspersed
7	Batteries: Dry cell, Ni-Cd cells,	04-2-2021	with
8	NiMetal hydride cells, Li ion battery, zinc air cells	04-2-2021	discussions
9	Fuel cells: H2-O2, CH3OH-O2,	05-2-2021	

10	phosphoric acid, molten carbonate	10-2-2021	
11	Corrosion:-Definition-theories of corrosion	11-2-2021	
12	galvanic corrosion, differential aeration corrosion, stress corrosion,	16-2-2021	
13	waterline corrosion-passivity of metals- galvanicseries	17-2-2021	
14	Factors influencing rate of corrosion-corrosion control	18-2-2021	
15	Protective coatings: Surface preparation, cathodic	19-2-2021	
16	Anodic coatings, electroplating, electroless plating (nickel).	23-2-2021	
17	Paints (constituents, functions, special paints).	25-2-2021	

UNIT III: MATERIAL CHEMISTRY

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO3: Explain the preparation of semiconductors and nanomaterials, engineering applications of nanomaterials, superconductors and liquidcrystals.

1	Part I: Non-elemental semiconducting materials	02-3-2021	
2	Semiconductor devices (p-n junction diode as rectifier, junction transistor	06-3-2021	
3	Insulators & magnetic materials: electrical insulators	09-3-2021	
· 4	Ferro and ferri magnetism-Hall effect and its applications.	10-3-2021	Lecture
5	Part II: Nano materials:- Introduction-sol-gel method-	20-3-2021	interspersed with
6	characterization by BET, SEM and TEM methods	24-3-2021	discussions
7	Applications of graphene-carbon nanotubes and fullerenes:	25-3-2021	
8	Types, preparation and applications Liquid crystals	05-4-2021	
9	Introduction-types-applications. Super conductors:-Type –I, Type II-characteristics and applications.	01-4-2021	

UNIT IV: SPECTROSCOPIC TECHNIQUES & NON CONVENTIONAL ENERGY SOURCES

(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.)

CO4: Recall the increase in demand for power and hence alternative sources of power are studied due to depleting sources of fossil fuels. Advanced instrumental techniques are introduced.

1	Part A: SPECTROSCOPIC TECHNIQUES Electromagnetic spectrum-UV	09-4-2021
2.	laws of absorption, instrumentation,	09-4-2021
3.	Theory of electronic spectroscopy, Frank-condon	09-4-2021

Application of the property of the control of the c	principle		The transfer of the second
4.	chromophores and auxochromes, intensity shifts, applications	09-4-2021	Lecture interspersed
5.	FT-IR (instrumentation and IR of some organic compounds, applications).	10-4-2021	with discussions
6.	Magnetic resonance imaging and CT scan (procedure & applications).	10-4-2021	
7.	Part B: NON CONVENTIONAL ENERGY SOURCES	06-4-2021	
8.	Design, working, schematic diagram, advantages and disadvantages of photovoltaic cell,	06-4-2021	
	hydropower, geothermal power,	07-4-2021	
	Tidal and wave power	07-4-2021	
	UNIT V: ADVANCED CONCEPTS/TOPICS IN O	CHEMISTRY	
	Ingineering Chemistry by Jain and Jain; Dhanpat Rai le basics of computational chemistry and molecular		.)
1.	Computational chemistry: Introduction, Ab Initio studies Molecular switches	10-4-2021	
2.	characteristics of molecular motors and machines, Rotaxanes	10-4-2021	Lecture
3	Catenanes as artificial molecular machines, prototypes	11-4-2021	interspersed with
4.	linear motions in rotaxanes, an acid-base controlled molecular shuttle	11-4-2021	discussions
5.	a molecular elevator,	11-4-2021	
	an autonomous light-powered molecular motor	12-4-2021	
7.	Computational chemistry: Introduction, Ab Initio studies Molecular switches	12-4-2021	
8.	characteristics of molecular motors and machines,	12-4-2021	

FAQULTY SIGNATURE

Mullelle

A domy HOD SIGNATURE

Section : CSE-		EMATICS – 1 Date: 04-01-2021	Page No	: 01 of 02
Revision No : 00		Prepared By: S.SUMAN	Approve	d By: HOD
Tools: Black bo				
No. of Periods		TOPIC	Date	Mode of Delivery
CO1: utilize me	an valı	S, SERIES AND MEAN VALUE THEORI ue theorems to real life problems thematics", Dr. T.K.V.Iyengar; S.Chand pu		
1		UENCES AND SERIES: rergence and Divergence		
2	Ratio			
3	Com	parison test		
4		ral test	From:	
5	Cauc	hy 's root test	06-01-2021	Lecture
6		nating series		interspersed
7		nitz 's rule	To:	with
8		value Theorems:	23-01-2021	discussions
9		ange 's mean value theorem		
	Cauc	hy 's mean value theorem		
10		hy 's mean value theorem or 's and Maclaurin 's theorems with		
10 11 UNIT-II DII	Taylo rema	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND		GREE
10 11 UNIT-II DII CO2: Solve the	Taylorema FFERE difference Mat	or 's and Maclaurin 's theorems with inders	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylo rema FFERE different Material Introfirst	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand puduction: Differential Equations of First order degree	ing fields	GREE
10 11 UNIT-II DII CO2: Solve the FB:" Engineerin	Taylorema FFERE difference Intro first Exact	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand puduction: Differential Equations of First order degree t Equations – Conditions of Exactness	ing fields	GREE
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylorema FFERE difference Intro first Exact	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand puduction: Differential Equations of First order degree	ing fields blications	GREE
10 11 UNIT-II DII CO2: Solve the TB:" Engineerin	FFERE difference Materials Introfirst Exact Equal Non	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree the Equations – Conditions of Exactness stions reducible to Exact Exact Differential Equations	ing fields blications From:	GREE
UNIT-II DIE CO2: Solve the FB:" Engineerin	FFERE difference Materials Introfirst Exact Equal Non	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand puduction: Differential Equations of First order degree t Equations – Conditions of Exactness entions reducible to Exact	ing fields blications	
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15	Taylorema FFERE difference Intro first Exact Equa Non Linea	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree the Equations – Conditions of Exactness stions reducible to Exact Exact Differential Equations	From: 25-01-2021	Lecture
10 11 UNIT-II DIE CO2: Solve the TB:" Engineerin 12 13 14 15 16	FFERE different Materials Series Seri	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree the Equations — Conditions of Exactness at itions reducible to Exact Exact Differential Equations are Differential Equations of first order	ing fields blications From:	Lecture intersperse
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	FFERE difference Materials Intro- first Exact Equal Non Linear Bern Equal Orthology	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree the Equations — Conditions of Exactness extract Differential Equations are Differential Equations are Differential Equations of first order ouli Equation entions reducible to linear ogonal Trajectories - Cartesian	From: 25-01-2021	Lecture intersperse with
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Introfirst Exact Equal Non Linear Bern Orth	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree to Equations – Conditions of Exactness at Exact Differential Equations error Differential Equations are Differential Equations of first order ouli Equation entions reducible to linear ogonal Trajectories – Cartesian ogonal Trajectories – Polar	From: 25-01-2021 To:	Lecture intersperse
10 11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Introfirst Exact Equal Non Linear Bern Orth	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree the Equations — Conditions of Exactness extract Differential Equations are Differential Equations are Differential Equations of first order ouli Equation entions reducible to linear ogonal Trajectories - Cartesian	From: 25-01-2021 To:	Lecture intersperse with
10 11 UNIT-II DIF CO2: Solve the FB:" Engineerin 12 13 14 15 16 17 18 19 20	Introfirst Exact Equal Non Linear Equal Orth New	or 's and Maclaurin 's theorems with inders NTIAL EQUATIONS OF FIRST ORDER AND ential equations related to various engineer thematics", Dr. T.K.V.Iyengar; S.Chand pure duction: Differential Equations of First order degree to Equations – Conditions of Exactness at Exact Differential Equations error Differential Equations are Differential Equations of first order ouli Equation entions reducible to linear ogonal Trajectories – Cartesian ogonal Trajectories – Polar	From: 25-01-2021 To:	Lecture intersperse with

CO3: Solve	the differential equations related to various engine	ering fields	
TB: Engin	eering Mathematics", Dr. T.K.V.Iyengar; S.Chand	publications	
24	Linear DE of constant coefficients	From:	1
25	Solutions of $f(D) = Q(x)$, $Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28 29	$Q(x) = e^{ax}V(x)$	& 	with
30	Q(x) = xV(x)	From: 22-02-2021	discussions
31	$Q(x) = x^n \sin ax \text{ or } \cos ax$ Method of variation of parameters	To:	
32	Method of variation of parameters		
	Applications: LCR Circuit	06-03-2021	
33	Simple Harmonic Motion		
UNIT-IV	PARTIAL DIFFERENTIATION		
CO4: Famili TB: Engine	rize with functions of several variables which is use ering Mathematics", Dr. T.K.V.Iyengar; S.Chand	eful in optimiza	tion
34	Homogeneous function; Euler's Theorem	Judications	
35	Total Derivative; Chain rule		
36	Taylor's mean value theorems	From: 08-03-2021	
37	Maclaurin's series	08-03-2021	Lecture interspersed
38	Jacobians, formulae	To:	with
39	Functional dependence	27-03-2021	discussions
40	Maxima minima of two variables		
41	Langranges method	<u> </u>	E 1007
UNIT-V: MU	LTIPLE INTEGRALS		
CO5: Apply of TB: "Enginee	double integration techniques in evaluating areas being Mathematics", Dr. T.K.V.Iyengar; S.Chand p	ounded by regi	on
42	Introduction Introduction	From:	
43	Double integrals	29-03-2021.	
44	Triple integrals	To	Lecture
45	Change of order of integration	To:	interspersed with
46	Change of variable	12-04-2021	discussions
47	Applications: Finding areas		
48	Finding volumes		

Signature of Faculty

Mulland

Signature of HOD

Section : CSE-	B Date: 04-01-2021	Page No	:01 of 02
Revision No : 00			
Tools: Black bo			
No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize me: TB:" Engineeri	ENCES, SERIES AND MEAN VALUE THEOR an value theorems to real life problems ng Mathematics", Dr. T.K.V.Iyengar; S.Chand p		
1	SEQUENCES AND SERIES: Convergence and Divergence		
2	Ratio test		
3	Comparison test		
4	Integral test	From:	
5	Cauchy 's root test	06-01-2021	Lecture
6	Alternating series		intersperse
7	Leibnitz 's rule	To:	with discussions
8	Mean Value Theorems: Rolle 's Theorem	23-01-2021	
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
10 11	Taylor 's and Maclaurin 's theorems with		
11 UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND		GREE
11 UNIT-II DIF CO2: Solve the	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order	ing fields	GREE
UNIT-II DIF CO2: Solve the FB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin 12	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	GREE
UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	GREE Lecture
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation	ing fields blications From:	Lecture
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the B:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture intersperse with

UNIT-III: LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER

CO3: Solve the differential equations related to various engineering fields

TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x)$, $Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
28	$Q(x) = e^{ax}V(x)$	&	with
29	Q(x) = xV(x)	From:	discussions
30	$Q(x) = x^n \sin ax \ or \ \cos ax$	22-02-2021	
31	Method of variation of parameters	To:	
32	Applications: LCR Circuit	06-03-2021	

UNIT-IVPARTIAL DIFFERENTIATION

CO4: Familirize with functions of several variables which is useful in optimization

TB: "Engineering Mathematics", Dr. T.K.V. Iyengar; S. Chand publications

Homogeneous function; Euler's Theorem		interspersed with
Total Derivative; Chain rule	From:	
Taylor's mean value theorems	08-03-2021	
Maclaurin's series		
Jacobians, formulae	To:	
Functional dependence	27-03-2021	
Maxima minima of two variables		
Langranges method		
	Total Derivative; Chain rule Taylor's mean value theorems Maclaurin's series Jacobians, formulae Functional dependence Maxima minima of two variables	Total Derivative; Chain rule From: 08-03-2021 Maclaurin's series Jacobians, formulae Functional dependence Maxima minima of two variables

UNIT-V: MULTIPLE INTEGRALS

CO5: Apply double integration techniques in evaluating areas bounded by region TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications

41	Introduction	From:	Lecture interspersed with discussions
. 42	Double integrals	29-03-2021	
43	Triple integrals	To:	
44	Change of order of integration	10.	
45	Change of variable	17-03-2021	
46	Applications: Finding areas		
47	Finding volumes		

Brunning Signature of Faculty Signature of HOD

Section : CSE-A	Date: 08-01-2021	Page N	o:01 of 03
Revision No: 00	Prepared By: Dr.G.Maithreyi	Approv	ed By: HOD
Tools: Black boa			
No. of Periods	TOPIC	Date	Mode of Delivery
	er full of happiness, Deliverance by Premcha		
	ffective listening skills for better comprehens	ion of academic	lectures and
	y native speakers		
	glish, Maruthi Publications, —The Individual So		ublications
1	A Drawer full of happiness	08-01-21	
2	Listening : Short Audio Texts	08-01-21	
3	Speaking: Asking and answering questions	08-01-21	
4	Reading: Skimming and Scanning	19-01-21	Lecture interspersed
5	Reading for Writing: Paragraph writing	19-01-21	with discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9 .	Long Answers .	25-01-21	
10	Short Answers	27-01-21	
CO2: Focus on a and authentic ma	letter to his daughter Indira on her birthday, Bos ppropriate reading strategies for comprehens aterials sh, Maruthi Publications, —The Individual Societ	sion of various a	academic text
12	Nehru's letter to his daughter Indira on her		
	birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15 (02-)	Reading: Identifying sequence of ideas	02-02-21	Lecture intersperse

16	Reading for Writing: Summarizing	03-02-21	with discussions
17	Vocabulary: Technical vocabulary	04-02-21	
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture interspersed
26	Speaking: Discussing specific topics in pairs	16-02-21	with discussions
27	Reading: Reading a text in detail	17-02-21	discussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

The state of the s	English.	The State of the S	discussions
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

41	Stay Hungry-Stay foolish	30-03-21	
	The state of the s	01 04 21	Lecture
42	Listening Identifying key terms	01-04-21	interspers with
43	Speaking: Formal oral presentations	05-04-21	discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	-

Signature of Faculty

PRINCIPAL

Section : CSE-	OMMUNICATIVE ENGLISH B Date: 08-01-2021	Page N	o: 01 of 03
Revision No : 00			ed By: HOD
Tools: Black bo		Approv	ed by . HOD
No. of Periods	TOPIC	Date	Mode of Delivery
CO1: Facilitate English spoken	wer full of happiness, Deliverance by Premchan effective listening skills for better comprehension by native speakers anglish, Maruthi Publications, —The Individual Soc	on of academic	
1	A Drawer full of happiness	08-01-21	
2	Listening: Short Audio Texts	08-01-21	
3	Speaking: Asking and answering questions	08-01-21	Lostino
4	Reading: Skimming and Scanning	19-01-21	Lecture interspersed with
5	Reading for Writing: Paragraph writing	19-01-21	discussions
6	Vocabulary: Technical Vocabulary	20-01-21	
7	Grammar: Content words and function words	20-01-21	
8	The Deliverance : Munshi Prem Chand	21-01-21	
9	Long Answers .	25-01-21	
10	Short Answers	27-01-21	
CO2: Focus on and authentic n	s letter to his daughter Indira on her birthday, Boso appropriate reading strategies for comprehens naterials lish, Maruthi Publications, —The Individual Society	ion of various a	academic text
12	Nehru's letter to his daughter Indira on her birthday		
13	Listening: Answering a series of questions	28-01-21	
14	Speaking: Discussion in pairs	01-02-21	
15	Reading: Identifying sequence of ideas	02-02-21	Lecture interspersed

16	Reading for Writing: Summarizing	03-02-21	with
17	Vocabulary: Technical vocabulary	04-02-21	discussions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture
26	Speaking: Discussing specific topics in pairs	16-02-21	interspersed with
27	Reading: Reading a text in detail	17-02-21	discussions
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications

33	Like a Tree, Unbowed: Wangari Maathai- biography		
34	Listening: Making predictions while listening	03-03-21	Lecture interspersed
35	Speaking: Role plays for practice of conversational	04-03-21	with

The second designation	English		discussion
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

TB: Infotech I	English, Maruthi Publications, —The Individual Society	yl, Pearson Pub	lications
41	Stay Hungry-Stay foolish	30-03-21	
42	Listening Identifying key terms	01-04-21	Lecture interspersed with
43	Speaking: Formal oral presentations	05-04-21	discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	7.
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	

PRINCIPAL SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 108

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R201110 PROGRAMMING FOR PROBLEM SOLVING USING C

		RAMMING FOR PROBLEM SOLVING U		
	: CSE-A	Date: 05/01/2021	Page No: 0	
	n No : 00	Prepared By: M.V.SUMANTH	Approved E	By : HOD
I ools: E	Black board, P			
No. of		TOPIC	Date	Mode of
Periods				Delivery
UNIT-I		ction to C language	santa davidanina of	a aamnutar
		the computer systems, computing environme of a C Program.	ients, developing of	a computer
		r Problem Solving, Behrouz A. Forouzan, I	Richard F.Gilberg, C	CENGAGE
1	Computer Sy			
2	Computing E	nvironments		
3	Computer lan	guages		
4	Creating and	running Programs		
5	Computer Nu	mbering System		
6	Storing Integ	ers		Lecture
7	Storing Real			Interspersed
8	C Programs,	Identifiers	From:	With discussions
9	Types, Varial	ole	06/01/21	
10	Constants, In	put/output	Т	
11	Programming	Examples	To:	
12	Scope, Storag	ge Classes and Type Qualifiers	27/01/21	
13	Expressions l	Precedence and Associativity		
14	Side Effects,	Evaluating Expressions		
15	Type Conver	sion Statements		
16	Simple Progr	ams		
17	Command Li	ne Arguments		
18	Tutorial			
UNIT-I	I Operate	ors, Selection and Repetition		
CO2: T		ge of the operators, selection, control state	ments and repetition	in C.
TB1: Pi	rogramming fo	r Problem Solving, Behrouz A. Forouzan, I	Richard F.Gilberg, C	CENGAGE
19	Exact Size In	teger Types		
20	Logical Bitw			
21	Shift Operato	rs		
22	Logical Data	and Operators		.
23	Two Way Se	lection		Lecture
24	Multiway Sel	ection		interspersed with
				AAIGH

25

More Standard Functions

56	Arrays, and Pointers		interspersed
55	Compatibility, L value and R value	05/03/21	Lecture
54	Pointers to pointers	From:	Τ.,
53	Introduction	_	
No. of Periods	TOPIC	Date	Mode of Delivery
Preproce TB1: Pro	gramming for Problem Solving, Behrouz A. Forouzan,	, Richard F.Gilberg, C	
UNIT-IV			
52	Tutorial		
51	Programming Application		
50	Unions		
49	Structure		discussions
48	Enumerated Types		With
47	The Type Definition (Type def)		interspersed
46	A Programming Example – Morse Code	04/03/21	Lecture
45	String/ Data Conversion	To:	Τ
44	String Manipulation Functions		
43	Arrays of Strings	11/02/21	
42	String Input / Output Functions	From:	
41	String Concepts, C String		
40	Programming Example – Calculate Averages		
39	Multidimensional Arrays		
38	Two Dimensional Arrays		
37	Array Application		
36	Concepts, Using Array in C	, 8,	T
To learn TB1: Pro	learn about the design concepts of arrays, strings, enuabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan. Concepts, Using Array in C.		
	. , 8,		
Periods UNIT-II	I A Ct.: E. Ct. t II:		Delivery
No. of	TOPIC	Date	Mode of
35	Tutorial		
33	Programming Example The Calculator Program		
32	Looping Applications		
31	Other Statements Related to Looping	11/02/21	
30	Loops in C	To:	
29	Event and Counter Controlled Loops		
28	Initialization and Updating	28/01/21	
26 27	Concept of Loop Pretest and Post-test Loops	From:	discussions

57	Pointer Arithmetic and Arrays	To:	with
58	Memory Allocation Function	26/03/21	discussions
59	Array of Pointers		
60	Programming Application		
61	Processor Commands		
62	Tutorial		
UNIT-V	Files and Functions		
CO5: To	assimilate about File I/O and significance of functions.		
	ogramming for Problem Solving, Behrouz A. Forouzan, R	cichard F.Gilberg, C	ENGAGE
63	Function in C		
64	User Defined Functions		Lecture
65	Inter-Function Communication		
66	Standard Functions		
67	Passing Array to Functions	From:	
68	Passing Pointers to Functions	27/03/21	
69	Recursion	27/03/21	
70	Passing an Array to Function	To:	
71	Files, Streams	10/04/21	interspersed with
72	Standard Library Input / Output Functions		discussions
73	Formatting Input / Output Functions		discussions
74	Character Input / Output Functions		
75	Text versus Binary Streams		
76	Functions for Files		
77	Converting File Type		
78	Designing, Structured Programs		
79	Tutorial		

Signature of Faculty

Signature of HOD

TENTATIVE LESSON PLAN: R201110 PROGRAMMING FOR PROBLEM SOLVING USING C

Course	Title: PROGRAMMING FOR PROBLEM SOLVING	USING C (R201110)	
Section	: Sec B Date : 05/01/2021	Page No: 01	
Revisio	n No: 00 Prepared By: Dr. B.Srikanth	Approved B	y: HOD
Tools: 1	Black board, PPTs, Moodle		
No. of	TOPIC	Date	Mode of
Periods			Delivery
UNIT-I	0 0		
	To learn about the computer systems, computing environ	nments, developing of a	computer
	n and Structure of a C Program. rogramming for Problem Solving, Behrouz A. Forouzan	Dishard F Cilhara C	ENCACE
1	Computer Systems	, Actuard F. Gilberg, C.	ENGAGE
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		
5	Computer Numbering System		
6	Storing Integers		Lecture Interspersed With discussions
7	Storing Real Numbers		
8	C Programs, Identifiers	From:	
9	Types, Variable	06/01/21	
10	Constants, Input/output		
11	Programming Examples	To:	
12	Scope, Storage Classes and Type Qualifiers	30/01/21	
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	Tutorial	*	
UNIT-	I Operators, Selection and Repetition		
	o gain knowledge of the operators, selection, control sta		
TB1: P	rogramming for Problem Solving, Behrouz A. Forouzar	, Richard F.Gilberg, C	ENGAGE
19	Exact Size Integer Types		T
20	Logical Bitwise Operators		
21	Shift Operators		
22	Logical Data and Operators		
23	Two Way Selection		Lecture
24	Multiway Selection		interspersed
25	More Standard Functions		With
	1		

26	Concept of Loop		discussions
27	Pretest and Post-test Loops	From:	
28	Initialization and Updating	1/2/21	
29	Event and Counter Controlled Loops		
30	Loops in C	To:	
31	Other Statements Related to Looping	10/02/21	
32	Looping Applications		
33	Programming Example The Calculator Program		
35	Tutorial		
No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-II	Arrays, String, Enum, Structure, Unions		
To learn	learn about the design concepts of arrays, strings, enumabout their usage. ogramming for Problem Solving, Behrouz A. Forouzan, Concepts, Using Array in C		
37	Array Application		
38	Two Dimensional Arrays		
39	Multidimensional Arrays		
40	Programming Example – Calculate Averages		
41	String Concepts, C String		
42	String Input / Output Functions	From:	
43	Arrays of Strings	11/02/21	
44	String Manipulation Functions	11/02/21	
45	String/ Data Conversion	To:	
46	A Programming Example – Morse Code	05/03/21	Lecture
47	The Type Definition (Type def)		interspersed
48	Enumerated Types		with
49	Structure		discussions
50	Unions		discussions
51	Programming Application		
52	Tutorial		
Preproce	assimilate about pointers, dynamic memory allocation		
No. of	TOPIC	Date	Mode of
Periods			Delivery
53	Introduction		
54	Pointers to pointers		
55	Compatibility, L value and R value		Lecture
56	Arrays, and Pointers	From:	interspersed

57	Pointer Arithmetic and Arrays	06/03/21	with
58	Memory Allocation Function		discussions
59	Array of Pointers	To:	
60	Programming Application	20/03/21	
61	Processor Commands		
62	Tutorial		
UNIT-V	Files and Functions		
CO5: To	assimilate about File I/O and significance of functions	i.	
TB1: Pr	ogramming for Problem Solving, Behrouz A. Forouzan	, Richard F.Gilberg, C	ENGAGE
63	Function in C		
64	User Defined Functions		
65	Inter-Function Communication		
66	Standard Functions		
67	Passing Array to Functions	From:	
68	Passing Pointers to Functions	22/03/21	
69	Recursion	22/03/21	Lecture
70	Passing an Array to Function	To:	
71	Files, Streams	10/04/21	interspersed
72	Standard Library Input / Output Functions		discussions
73	Formatting Input / Output Functions		discussions
74	Character Input / Output Functions		
75	Text versus Binary Streams		
76	Functions for Files		
77	Converting File Type		
78	Designing, Structured Programs		
79	Tutorial		

B. Snikant b Signature of Faculty Signature of HOD
8/1/2/

Section :C	CSE-A Date	e: 08.01.2021	Page No	: 00
Revision N		pared By : Dr. J. Ashok		d By: HOD
Tools:	W.	·	1126713	<u> </u>
No. of Periods		ГОРІС	DATE	Mode of Delivery
UNIT-I	Wave Optics		From:	
	CO1: Analyze the differ	ences between interference and	08/01/2021	
	diffraction with appli	cations. And illustrate the	To:	Lecture
	resolving power of various	us optical instruments.	30/01/2021	interspersed
1	INTERFERENCE: Intr	oduction		with
2	Principle of Superpositio	n		discussions
3	Coherent Sources-Types			
4	Interference- Types			
•5	Interference in Thin Film	ıs ·		
6	Colours in Thin Film			
7	Newton's Rings			
8	Applications of Interferen	nce		
9	Problems			
10	Diffraction: Introduction			
11	Fresnel and			
	Fraunhoffer Diffraction			
12	Fraunhoffer diffraction at	single slit		
13	Fraunhoffer diffraction at			Lecture
14	Fraunhoffer diffraction at	Double Slit		interspersed
15	Fraunhoffer diffraction at	N-Slits		with
16	Grating Equation			discussions
17	Dispersive Power of Grat	ing		
18	Resolving Power of Grati	ng		
19	Problems			
20	Polarization: Introduction	on		
21	Types of Polarization			
22	Polarization by Reflection			
23	Polarization by Duoble R	efraction		
24	Nicol Prism			
25	Quarter Wave & Half Wa	ve Plates and Problems		100
UNIT- II	Lasers and Fiber Optics		From:	
	CO2: Explain various ty	pes of emission of radiation.	01-02-2021	Lecture
		n engineering applications.	To:	interspersed
		of optical fibers in medical,		with
		fields. Apply the fiber optic	13-02-2021	discussions
26	concepts in various fields.			
26	Lasers: Introduction			
27	Characteristics of Laser			
28	Spontaneous and Stimulat	ted emission		
29	Einstein's Coefficients	4736-1		
30	Population Inversion, Last			
31	Pumping Mechanism-Pun	nping method		

32	Ruby Laser		
33	Helium Neon Laser		
34	Applications of Lasers	+	
35	Fiber Optics: Introduction		
36	Principle of Optical Fiber	1	
37	Acceptance angle and Numerical Aperture	The control of the co	a proper process of the
38	Classifications optical fibers based on refractive index		
	profile and modes		Lecture
39	Propagation of electromagnetic wave through optical		interspersed
	fibers, applications		with
40	Problems		discussions
UNIT -III	Quantum Mechanics, Free Electron Theory and	From:	1
	Band theory	22-02-2021	
	CO3: Describe the dual nature of matter. Identify the	To	
	role of Schrodinger's time independent wave equation	10-03-2021	
	in studying particle in one-dimensional infinite	10 03 2021	
	potential well. Identify the role of classical and		
	quantum free electron theory in the study of electrical		
	conductivity.		
41	Quantum Mechanics: Introduction		
42	Dual Nature of Matter		
43	Heisenberg's Uncertainty Principle, Significance and		
	properties of wave function		
44	Schrodinger Time Independent Equation		
45	Schrodinger Time Dependent Equation		
46	Particle in a Box	1	
47	Problems	-	Lecture
48	Free Electron Theory: Introduction	1	interspersed
49	Classical free electron theory- merits and demerits	1	with
50	Quantum free electron theory- merits and demerits	1	discussions
51	Equation for electrical conductivity based on quantum	· v	
31	free electron theory		
52	Fermi-Dirac distribution, Fermi energy.		
53	Density of states (3D)		
54	Problems		
55			
56	Band theory of Solids :Introduction		
57	Bloch's Theorem, Kronig - Penney model		
58	E vs K diagram - v vs K diagram		
59	Effective Mass of Electron, Concept of Hole		
	Energy Bands in Crystalline Solids Classification	_	
UNIT-IV	Dielectric and Magnetic Materials	From	
	CO4: Explain the concept of dielectric constant and	12-03-2021	
	polarization in dielectric materials. Explain the applications of dielectric and magnetic materials.	To 25.02.2021	
	Apply the concept of magnetism to magnetic devices.	25-03-2021	
60	Dielectric Materials: Introduction, Dielectric		
00	polarization		
61	Types of polarizations- Electronic polarisation		Lecture
62	Ionic polarisation, Orientation polarizations		interspersed
63	Lorentz internal field		with
64			discussions
the state of the s	Clausius-Mossotti equation, Piezoelectricity. Magnetic Materials: Introduction		discussions
65		Property and the second	
65 66	Magnetic dipole moment, Magnetization, Magnetic	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	

67	Origin of permanent magnetic moment		
68	Classification of magnetic materials: Dia, para, Ferro, antiferro and Ferri magnetic materials		
69	Domain concept for Ferromagnetism, Domainwalls		
70	Hysteresis soft and hard magnetic materials	and the Color of the Color of the Color	
71	Eddy currents, Engineering applications and Problems		
UNIT – V		From	
	CO5: Explain the properties of charge carriers in	26-03-2021	
	semiconductors . Identify the type of semiconductor	То	
	using Hall effect. Identify applications of	03-04-2021	
	semiconductors in electronic devices. Explain		
	Meissner's effect, BCS theory & Josephson effect in superconductors.		
72	Semiconductors: Introduction, Intrinsic semiconductors		
73	Density of charge carriers ,Electrical conductivity, Fermi level		Lecture interspersed
74	Extrinsic semiconductors, density of charge carriers,		with discussions
	Dependence of Fermi energy on carrier concentration and temperature		discussions
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	Superconductors: Introduction – Properties of superconductors		
78	Meissner effect, Type I and Type II superconductors		
70	BCS theory, Josephson effects		
	(AC and DC)		
80	SQUID's – High Tc superconductors, Applications of		
	superconductors		

J. Ashall Signature of Faculty Signature of HOD

PRINCIPAL PRINCIPAL

Section :C		Page No	: 00
Revision N	o:00 Prepared By: Dr. J. Ashok		d By: HOD
Tools:			
No. of Periods	TOPIC	DATE	Mode of Delivery
UNIT-I	Wave Optics	From:	
	CO1: Analyze the differences between interference and	08/01/2021	
	diffraction with applications. And illustrate the	To:	Lecture
	resolving power of various optical instruments.	30/01/2021	interspersed
1	INTERFERENCE: Introduction		with
2	Principle of Superposition		discussions
3	Coherent Sources-Types		
4	Interference- Types		
5	Interference in Thin Films		
6	Colours in Thin Film		
7	Newton's Rings		
8			
9	Applications of Interference Problems		
9	Problems		
10	Diffraction: Introduction		
10	Diffraction: introduction		
11	Fresnel and		
	Fraunhoffer Diffraction .		
12	Fraunhoffer diffraction at single slit		
13	Fraunhoffer diffraction at single slit		Lecture
14	Fraunhoffer diffraction at Double Slit		interspersed
15	Fraunhoffer diffraction at N-Slits		with
16	Grating Equation		discussions
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	Polarization: Introduction		
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Duoble Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates and Problems		
UNIT- II	Lasers and Fiber Optics	From:	
	CO2: Explain various types of emission of radiation.	01-02-2021	Lecture
	Identify the role of laser in engineering applications.	To:	interspersed
	Identify the applications of optical fibers in medical,		with
	communication and other fields. Apply the fiber optic	13-02-2021	discussions
	concepts in various fields.		
26	Lasers: Introduction		
27	Characteristics of Laser		
28	Spontaneous and Stimulated emission		
29	Einstein's Coefficients	The late of the same of the same of the	e was assistanted a
30	Population Inversion, Lasing action		makan sebesaran kemada da sebesaran berasaran
31	Pumping Mechanism-Pumping method		

7			_	
	32	Ruby Laser		
	33	Helium Neon Laser		
	34	Applications of Lasers		
	35	Fiber Optics: Introduction		
Zina ekoke	36	Principle of Optical Fiber	or and a second of the second	Cartillo Der Kraus (Priest 2000)
	37	Acceptance angle and Numerical Aperture	STATE OF THE PARTY AND THE PAR	
	38	Classifications optical fibers based on refractive index		
		profile and modes		Lecture
	39	Propagation of electromagnetic wave through optical		intersperse
		fibers, applications		with
	40	Problems		discussion
	UNIT -III	Quantum Mechanics, Free Electron Theory and	From:	
		Band theory	22-02-2021	
		CO3: Describe the dual nature of matter. Identify the	To	
		role of Schrodinger's time independent wave equation	10-03-2021	
		in studying particle in one-dimensional infinite	10-03-2021	
		potential well. Identify the role of classical and		
		quantum free electron theory in the study of electrical		
		conductivity.		
	41	Quantum Mechanics: Introduction		
	42	Dual Nature of Matter		
	43	Heisenberg's Uncertainty Principle, Significance and	+	
	45	properties of wave function		
	44	Schrodinger Time Independent Equation		
	45	Schrodinger Time Independent Equation Schrodinger Time Dependent Equation		
	46	Particle in a Box	1	
				Lecture
	47	Problems From Floatron Theorem Introduction		intersperse
	49	Free Electron Theory: Introduction		with
		Classical free electron theory- merits and demerits		discussion
	50	Quantum free electron theory- merits and demerits		als cussion.
	51	Equation for electrical conductivity based on quantum		
	52	free electron theory	100	
	52	Fermi-Dirac distribution, Fermi energy.		
	53	Density of states (3D)		
	54	Problems		
	55	Band theory of Solids :Introduction		
	- 56	Bloch's Theorem, Kronig - Penney model		
	57	E vs K diagram - v vs K diagram		
	58	Effective Mass of Electron, Concept of Hole		
	59	Energy Bands in Crystalline Solids Classification		
	UNIT-IV	Dielectric and Magnetic Materials	From	
		CO4: Explain the concept of dielectric constant and	12-03-2021	
		polarization in dielectric materials. Explain the	To	
		applications of dielectric and magnetic materials.	25-03-2021	
		Apply the concept of magnetism to magnetic devices.		
	60	Dielectric Materials: Introduction, Dielectric		
		polarization		
The transmit	61	Types of polarizations- Electronic polarisation		Lecture
	62	Ionic polarisation, Orientation polarizations		intersperse
	63	Lorentz internal field	and the same and the same	with
er helltearr	64	Clausius-Mossotti equation, Piezoelectricity.	and Silm Look	discussion
Spall and	65	Magnetic Materials: Introduction	effic ons	
	66	Magnetic dipole moment, Magnetization, Magnetic	Person Lisins	Living 150
	A Secretary of	susceptibility and permeability	Figure 1. Posto	

67	Origin of permanent magnetic moment		
68	Classification of magnetic materials: Dia, para, Ferro, antiferro and Ferri magnetic materials		
69	Domain concept for Ferromagnetism, Domainwalls		
	Hysteresis soft and hard magnetic materials	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1450 - 1718 - 144 - 1 - 1540 - 1
71	Eddy currents, Engineering applications and Problems		
UNIT – V	Semiconductors and Superconductors	From	
	CO5: Explain the properties of charge carriers in	26-03-2021	
	semiconductors . Identify the type of semiconductor	То	
	using Hall effect. Identify applications of	03-04-2021	
	semiconductors in electronic devices. Explain		
	Meissner's effect, BCS theory & Josephson effect in		
	superconductors.		
72	Semiconductors: Introduction, Intrinsic		
	semiconductors		
73	Density of charge carriers ,Electrical conductivity,		Lecture
	Fermi level		interspersed
74	Extrinsic semiconductors, density of charge carriers,		with .
	Dependence of Fermi energy on carrier concentration		discussions
	and temperature	1.4 (0.00)	
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	Superconductors: Introduction – Properties of		
	superconductors		
78	Meissner effect, Type I and Type II superconductors		
70	BCS theory, Josephson effects		
	(AC and DC)		
80	SQUID's – High Tc superconductors , Applications of superconductors		

J. ASKUL Signature of Faculty Signature of HOD

PRINCIPAL

of welloof

SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 108

TENTATIVE LESSON PLAN: R201101

	ATHEMATICS – 1	Dana Ma	. 01 af 02
Section : IT	Date: 04-01-2021		: 01 of 02
Revision No : 00		O Approve	ed By: HOD
Tools: Black bo No. of Periods	TOPIC	Date	Mode of Delivery
CO1:utilize mea	ENCES, SERIES AND MEAN VALUE THEOR an value theorems to real life problems and Mathematics", Dr. T.K.V.Iyengar; S.Chand possible SEQUENCES AND SERIES:		
2	Convergence and Divergence Ratio test		
3	Comparison test	Enom	
5	Integral test Cauchy 's root test	From: 06-01-2021	Lecture
7	Alternating series Leibnitz 's rule	To: 23-01-2021	intersperse with discussions
8	Mean Value Theorems: Rolle 's Theorem	25-01-2021	discussions
9 10	Lagrange 's mean value theorem Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND	D FIRST DEEC	GREE
UNIT-II DIF	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree	ing fields	FREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness	ing fields	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact	ing fields blications	GREE
UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations	ing fields	GREE
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order	ing fields blications From:	GREE Lecture
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER ANd differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation	ing fields blications From:	Lecture intersperse
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand pu Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian	From: 25-01-2021	Lecture intersperse with
11 UNIT-II DIF CO2: Solve the TB:" Engineerin 12 13 14 15 16 17 18 19	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear	From: 25-01-2021	Lecture intersperse
11 UNIT-II DIF CO2: Solve the ΓΒ:" Engineerin 12 13 14 15 16 17 18 19 20	Taylor 's and Maclaurin 's theorems with remainders FERENTIAL EQUATIONS OF FIRST ORDER AND differential equations related to various engineer g Mathematics", Dr. T.K.V.Iyengar; S.Chand put Introduction: Differential Equations of First order first degree Exact Equations – Conditions of Exactness Equations reducible to Exact Non Exact Differential Equations Linear Differential Equations Linear Differential Equations of first order Bernouli Equation Equations reducible to linear Orthogonal Trajectories - Cartesian Orthogonal Trajectories - Polar	From: 25-01-2021	Lecture intersperse with

2-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Total State Control of the Control o	ATTENDED TO A THE STATE OF THE STATE OF
UNIT-III: LI	NEAR DIFFERENTIAL EQUATIONS OF HI	GHER ORDER	distribution of the second of
CO3:Solve th	ne differential equations related to various engin	neering fields	
TB: Engine	ering Mathematics", Dr. T.K.V.Iyengar; S.Cha	nd publications	
24	Linear DE of constant coefficients	From:	
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax \ or \ \cos ax$	To:	Lecture
27	$Q(x) = x^n$	13-02-2021	interspersed
29	$Q(x) = e^{ax}V(x)$	& E	with
30	Q(x) = xV(x)	From: 22-02-2021	discussions
31	$Q(x) = x^n \sin ax \text{ or } \cos ax$	To:	
32	Method of variation of parameters		
32	Applications: LCR Circuit	06-03-2021	
UNIT-IVPAR	TIAL DIFFERENTIATION		
CO4:Familiri	ze with functions of several variables which is a	useful in ontimiza	#:a
TB:" Enginee	ring Mathematics", Dr. T.K.V.Iyengar; S.Chan	id publications	HOII
33	Homogeneous function; Euler's Theorem	- p = 5 Med Crons	
34	Total Derivative; Chain rule	From:	
35	Taylor's mean value theorems	08-03-2021	Lootuus
36	Maclaurin's series		Lecture interspersed
37 .	Jacobians, formulae	To:	with
38	Functional dependence	27-03-2021	discussions
39	Maxima minima of two variables		
40	Langranges method		
UNIT-V:MULT	TPLE INTEGRALS		
CO5: Apply d TB: Engineer	ouble integration techniques in evaluating area ing Mathematics", Dr. T.K.V.Iyengar; S.Chan	s bounded by reg	ion
41	Introduction January St. Charles	From:	
42	Double integrals .	29-03-2021	
43	Triple integrals	—	Lecture
44	Change of order of integration	To:	interspersed with
45	Change of variable	17-03-2021	discussions
46	Applications: Finding areas		
47	D: 1:		

Bruense Signature of Faculty

Finding volumes

47

Signature of HOD

SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 108

TENTATIVE LESSON PLAN: R201102

	OMMUNICATIVE ENGLISH Date: 08-01-2021	D NT-	. 01 -602	
Section : IT	8		: 01 of 03	
Revision No : 00 Tools: Black bo	J. Company of the com	Approve	d By: HOD	
No. of Periods	TOPIC	Date	Mode of Delivery	
CO1: Facilitate English spoken	wer full of happiness, Deliverance by Premchand effective listening skills for better comprehension by native speakers English, Maruthi Publications, —The Individual Societ		ectures and	
1	A Drawer full of happiness	08-01-21	bilcations	
2	Listening : Short Audio Texts	08-01-21	-	
3	Speaking: Asking and answering questions	08-01-21	T	
4	Reading: Skimming and Scanning	19-01-21	Lecture	
5	Reading for Writing: Paragraph writing	19-01-21	with discussions	
6	Vocabulary: Technical Vocabulary	20-01-21		
7	Grammar: Content words and function words	20-01-21		
8	The Deliverance : Munshi Prem Chand	21-01-21		
9 ·	Long Answers .	25-01-21		
10	Short Answers	27-01-21		
CO2: Focus on and authentic n	s letter to his daughter Indira on her birthday, Bosom appropriate reading strategies for comprehension naterials lish, Maruthi Publications, —The Individual Society ,	n of various ac	ademic texts	
12	Nehru's letter to his daughter Indira on her	- carson r uone	a civilis	
	birthday			
13	Listening: Answering a series of questions	28-01-21		
14	Speaking: Discussion in pairs	01-02-21	Lecture	
15	Reading: Identifying sequence of ideas	02-02-21	interspersed	

16	Reading for Writing: Summarizing	03-02-21	with discussions
17	Vocabulary: Technical vocabulary	04-02-21	discussions
18	Grammar: Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
- 21	Short Answers	10-02-21	

UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf

CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations

TB: Infotech English, Maruthi Publications, —The Individual Societyl, Pearson Publications

: infotech	English, Maruthi Publications, — The Individual Society	y II, I carson I ub	neations
24	Stephen Hawking-Positivity 'Benchmark	11-02-21	
25	Listening: Listening for global comprehension	15-02-21	Lecture intersperse
26	Speaking: Discussing specific topics in pairs	16-02-21	with discussion
27	Reading: Reading a text in detail	17-02-21	discussion
28	Reading for Writing: Summarizing	19-02-21	
29	Vocabulary: Technical vocabulary	22-02-21	
30	Grammar: Verbs - tenses; subject-verb agreement	22-02-21	
31	Shakespeare's Sister by Virginia Woolf	24-02-21	
32	Long Answers	26-02-21	

UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka

CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.

CONTROL STANDARD CONTROL OF CONTR	English	A second	discussions
36	Reading: Studying the use of graphic elements	08-03-21	
37	Reading for Writing: Information transfer	10-03-21	4
38	Vocabulary: Technical vocabulary	22-03-21	
39	Grammar: Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou

CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing

41	Stay Hungry-Stay foolish	30-03-21	
		~	Lecture
42	Listening Identifying key terms	01-04-21	interspersed
43	Speaking: Formal oral presentations	05-04-21	with discussions
44	Reading: Reading for comprehension	08-04-21	
45	Reading for Writing: Writing academic proposals	09-04-21	
46	Vocabulary: Technical vocabulary	10-04-21	
47	Grammar: Editing short texts	12-04-21	

Signature of Faculty

Signature of HOD

SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 108

TENTATIVE LESSON PLAN: 1R201110

Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C (1R201110)			
Section : IT	Date: 08/01/21	A.Y:2020-21	
Revision No: 00	Prepared By : M.SURESH BABU	Approved By: HOD	

Tools: Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I	Introduction to C language		
	learn about the computer systems, computing envi	ronments, developing of a	computer
	and Structure of a C Program.		
TB1: Pro	ogramming for Problem Solving, Behrouz A. Forouz	zan, Richard F.Gilberg, C	ENGAGE
1	Creating and running Programs	08/1/21	
2	Computer Numbering System	09/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	Lecture
5	C Programs, Identifiers	19/1/21	Interspersed
6	Types, Variable	20/1/21	With
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	discussions
9	Scope	23/1/21	
10	Storage Classes	25/1/21	
11	Type Qualifiers	27/1/21	
12	Expressions Precedence	28/1/21	
13	Associativity	29/1/21	
14	Side Effects, Evaluating Expressions	30/1/21	
15	Type Conversion Statements	1/2/21	
16	Simple Programs	2/2/21	
17	Command Line Arguments	3/2/21	
18	Tutorial	4/2/21	
UNIT-II	Operators, Selection and Repetition		
CO2: To	gain knowledge of the operators, selection, control	statements and repetition	in C.
TB1: Pro	ogramming for Problem Solving, Behrouz A. Forou	zan, Richard F.Gilberg, C	ENGAGE
19	Exact Size Integer Types	5/2/21	
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	Lecture
23,24, 25	3,24, Two Way Selection 10-12/2		interspersed
26	Multiway Selection	13/2/21	discussions
27	More Standard Functions	15/2/21	
28	Concept of Loop	16/2/21	

No. of Periods	TOPIC	Date	Mode of Delivery
36	Tutorial	26/2/21	
35	Programming Example		
34	Looping Applications	23-25/2/21	
33	Other Statements Related to Looping	22/2/21	
32	Loops in C	20/2/21	
31	Event and Counter Controlled Loops	19/2/21	
30	Initialization and Updating	18/2/21	
29	Pretest and Post-test Loops	17/2/21	

UNIT-III Arrays, String, Enum, Structure, Unions

CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

	8 8	- 0/	
37	Concepts, Using Array in C	27/2/21	
38	Array Application	1/3/21	
39	Two Dimensional Arrays	2/3/21	
40	Multidimensional Arrays	3/3/21	
41	Programming Example – Calculate Averages	4/3/21	
42	String Concepts, C String	5/3/21	
43,44 45	String Input / Output Functions	6-9/3/21	
46	Arrays of Strings	10/3/21	
47	String Manipulation Functions	11/3/21	
48	String/ Data Conversion	12/3/21	Lecture
49,50 51	A Programming Example	13-15/3/21	interspersed with
52	The Type Definition (Type def)	16/3/21	I
53	Enumerated Types	17/3/21	discussions
54,55	Structure, Unions	18-20/3/21	
56			
57	Programming Application	26/03/21	
58	Tutorial	26-31/3/21	

UNIT-IV Pointers

CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.

TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE

No. of Periods	TOPIC	Date	Mode of Delivery
59	Introduction	1/4/21	
60	Pointers to pointers	2/4/21	
61	Compatibility, L value and R value	3/4/21	
62	Arrays, and Pointers	5/4/21	
63	Pointer Arithmetic and Arrays	6/4/21	Lecture
64	Memory Allocation Function	7/4/21	interspersed
65	Array of Pointers	8/4/21	with

66	Programming Application	9/4/21	discussions	
67	Processor Commands	10/4/21		
68	Tutorial	10/4/21		
UNIT-V	Files and Functions			
CO5: To	assimilate about File I/O and significance of functions.			
TB1: Pr	ogramming for Problem Solving, Behrouz A. Forouzan, Richard	F.Gilberg, C	ENGAGE	
69	Designing, Structured Programs	12/4/21		
70	Function in C, User Defined Functions	13/4/21	Lecture	
71	Inter-Function Communication, Standard Functions	14/4/21		
72	Passing Array to Functions, Passing Pointers to Functions	15/4/21		
73	Recursion, Passing an Array to Function	16/4/21		
74	Files, Streams, Standard Library Input / Output Functions	17/4/21,	interspersed	
		19/4/21	with	
75	Formatting Input / Output Functions	20/4/21	discussions	
76	Character Input / Output Functions, Text versus Binary	21/4/21,		
	Streams	22/4/21		
77	Functions for Files, Converting File Type	23/4/21		
78	Tutorial	24/4/21		

Signature of Faculty

Signature of HOD

PRINCIPAL SRK Institute of Technology ENIKEPADU, VIJAYAWADA-521 108

TENTATIVE LESSON PLAN: R201117

Course Title: Applied Physics Section: IT Date: 08.01.2021		Page No: 00	
Revision No			ed By : HOD
Tools:			,
No. of Periods	TOPIC	DATE	Mode of Delivery
UNIT-I	Wave Optics	From:	
	CO1: Analyze the differences between interference and diffraction with applications. And illustrate the	08/01/2021 To:	Lecture
	resolving power of various optical instruments.	30/01/2021	intersperse
1	INTERFERENCE: Introduction		with discussion
2	Principle of Superposition		discussion
3	Coherent Sources-Types		
4	Interference- Types		
· 5	Interference in Thin Films		
6	Colours in Thin Film		
7	Newton's Rings		
8	Applications of Interference		
9	Problems		
10	Diffraction: Introduction		
11	Fresnel and		
	Fraunhoffer Diffraction		
12	Fraunhoffer diffraction at single slit		
13	Fraunhoffer diffraction at single slit		Lecture
14	Fraunhoffer diffraction at Double Slit		intersperse
15	Fraunhoffer diffraction at N-Slits		with
16	Grating Equation		discussion
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	Polarization: Introduction		
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Duoble Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates and Problems		
UNIT- II	Lasers and Fiber Optics	From:	Τ.,
	CO2: Explain various types of emission of radiation.	01-02-2021	Lecture
	Identify the role of laser in engineering applications.	To:	intersperse with
	Identify the applications of optical fibers in medical,	12 02 2021	discussion
	communication and other fields. Apply the fiber optic concepts in various fields.	13-02-2021	discussion
26	Lasers: Introduction		
27	Characteristics of Laser		
28	Spontaneous and Stimulated emission		a fall allaway in
29	Einstein's Coefficients		Total Carlo
30	Population Inversion, Lasing action		C I S S S S S S S S S S S S S S S S S S
31	Pumping Mechanism-Pumping method		

32	Ruby Laser		
33	Helium Neon Laser		
34			
35	Applications of Lasers Fiber Optics: Introduction		
36			
37	Principle of Optical Fiber		1
38	Acceptance angle and Numerical Aperture Classifications optical fibers based on refractive index		
30	profile and modes		Lecture
39	Propagation of electromagnetic wave through optical		intersperse
39	fibers, applications		with
40	Problems		discussion
UNIT -III	Quantum Mechanics, Free Electron Theory and	From:	1
UNII -III	Band theory	22-02-2021	
	CO3: Describe the dual nature of matter. Identify the	To	
	role of Schrodinger's time independent wave equation	10-03-2021	
	in studying particle in one-dimensional infinite	10-03-2021	
	potential well. Identify the role of classical and		
	quantum free electron theory in the study of electrical		
	conductivity.		
41	Quantum Mechanics: Introduction		
42	Dual Nature of Matter		
43	Heisenberg's Uncertainty Principle, Significance and		
73	properties of wave function		
44	Schrodinger Time Independent Equation		
45	Schrodinger Time Dependent Equation		
46	Particle in a Box		
			Lecture
47	Problems		intersperse
48	Free Electron Theory: Introduction		with
49	Classical free electron theory- merits and demerits		discussion
50	Quantum free electron theory- merits and demerits		41504551011
51	Equation for electrical conductivity based on quantum		
	free electron theory		
52	Fermi-Dirac distribution, Fermi energy.		
53	Density of states (3D)		
54	Problems		-
55	Band theory of Solids :Introduction		
56	Bloch's Theorem, Kronig - Penney model		
57	E vs K diagram - v vs K diagram		
58	Effective Mass of Electron, Concept of Hole		
59	Energy Bands in Crystalline Solids Classification		
UNIT-IV	Dielectric and Magnetic Materials	From	
	CO4: Explain the concept of dielectric constant and	12-03-2021	
	polarization in dielectric materials. Explain the	То	
	applications of dielectric and magnetic materials.	25-03-2021	
	Apply the concept of magnetism to magnetic devices.		
60	Dielectric Materials: Introduction, Dielectric		
	polarization		
61	Types of polarizations- Electronic polarisation		Lecture
62	Ionic polarisation, Orientation polarizations		intersperse
63	Lorentz internal field	The second second	with
64	Clausius-Mossotti equation, Piezoelectricity.	1 0 14 Kg/40 49 K	discussion
65	Magnetic Materials: Introduction	out 11 Sagges	
66	Magnetic dipole moment, Magnetization, Magnetic	av ersone i asu	g octions
	susceptibility and permeability	20 1101210-20 21	hey eladay.

67	Origin of permanent magnetic moment		
68	Classification of magnetic materials: Dia, para, Ferro,		
	antiferro and Ferri magnetic materials		
69	Domain concept for Ferromagnetism, Domainwalls		
.70	Hysteresis soft and hard magnetic materials	1	
71	Eddy currents, Engineering applications and Problems		
UNIT – V	Semiconductors and Superconductors CO5: Explain the properties of charge carriers in semiconductors. Identify the type of semiconductor using Hall effect. Identify applications of semiconductors in electronic devices. Explain Meissner's effect, BCS theory & Josephson effect in superconductors.	From 26-03-2021 To 03-04-2021	
72	Semiconductors: Introduction, Intrinsic semiconductors		Lecture
73	Density of charge carriers ,Electrical conductivity, Fermi level		interspersed with
.74	Extrinsic semiconductors, density of charge carriers, Dependence of Fermi energy on carrier concentration and temperature		discussions
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	Superconductors : Introduction – Properties of superconductors		E Sur
78	Meissner effect, Type I and Type II superconductors		
70	BCS theory, Josephson effects (AC and DC)		
80	SQUID's – High Tc superconductors , Applications of superconductors		

H.V. Elizabeth Signature of Faculty

Signature of HOD

Vagació Muscrials fou de la la Magnetia que le moderna a la company

PRINCIPAL SRK Institute of Technology ENIKEPADU. VIJAYAWADA-521 108