

## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : CIVIL</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : K.BASAVARAJU</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1:utilize mean value theorems to real life problems**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



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

**UNIT-IV PARTIAL DIFFERENTIATION****CO4: Familiarize 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	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
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: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : CE</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: N. Gayathri</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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 Societyll, Pearson Publications**

24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	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 Societyll, Pearson Publications**

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



	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	
<b>UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou</b>			
<b>CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing</b>			
<b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
41	<b>Stay Hungry-Stay foolish</b>	30-03-21	Lecture interspersed with discussions
42	<b>Listening</b> Identifying key terms	01-04-21	
43	<b>Speaking:</b> Formal oral presentations	05-04-21	
44	<b>Reading:</b> Reading for comprehension	08-04-21	
45	<b>Reading for Writing:</b> Writing academic proposals	09-04-21	
46	<b>Vocabulary:</b> Technical vocabulary	10-04-21	
47	<b>Grammar:</b> Editing short texts	12-04-21	

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# TENTATIVE LESSON PLAN: R201103

Course Title: Engineering Physics			
Section :CE	Date :08.01.2021	Page No :00	
Revision No :00	Prepared By:B.NAGA JYOTHIRMAI	Approved By : HOD	
Tools:			
No. of Periods	TOPIC	DATE	Mode of Delivery
UNIT-I	<b>WAVE OPTICS</b>		Lecture interspersed with discussions
	<b>CEO1:</b> To identify the importance of the optical phenomenon i.e. interference, diffraction and polarization related to its Engineering applications.		
1	<b>INTERFERENCE:</b> Introduction	<b>From:</b>  <b>08/01/2021</b>  <b>To:</b>  <b>30/01/2021</b>	
2	Principle of Superposition		
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	<b>Diffraction:</b> Introduction		
11	Fresnel and Fraunhofer Diffraction		
12	Fraunhofer diffraction at single slit		
13	Fraunhofer diffraction at single slit		
14	Fraunhofer diffraction at Double Slit		
15	Fraunhofer diffraction at N-Slits		
16	Grating Equation		
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	<b>Polarization :</b> Introduction		Lecture interspersed with discussions
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Duoble Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates		
26	Problems		
UNIT-II	<b>LASERS AND FIBER OPTICS</b>		Lecture interspersed with discussions
	<b>CEO2:</b> Understand the mechanism of stimulated emission of light, utilization of lasers as coherent light sources for low and high energy applications, study of propagation of light through optical fibers and their implications in optical communications.		
27	<b>Lasers :</b> Introduction	<b>From:</b>  <b>01-02-2021</b>	
28	Characteristics of Laser		
29	Spontaneous and Stimulated emission		
30	Einstein's Coefficients		
31	Population Inversion, Lasing action		



32	Pumping Mechanism-Pumping method	<b>To:</b>  <b>13-02-2021</b>	
33	Ruby Laser		
34	Helium Neon Laser		
35	Applications of Lasers		
36	<b>Fiber Optics:</b> 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		
<b>UNIT-III</b>	<b>ENGINEERING MATERIALS</b>		
	<b>CEO3:</b> To explain the significant concepts of dielectric and magnetic materials that leads to potential applications in the emerging micro devices.		
43	<b>Dielectric Materials:</b> Introduction,		
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		
50	<b>Magnetic Materials:</b> Introduction		
51	Magnetic dipole moment, Magnetization, Magnetic susceptibility and permeability		
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		
<b>UNIT-IV</b>	<b>ACOUSTICS AND ULTRASONICS</b>	<b>From</b>	
	<b>CEO4:</b> To study ultrasonics productions methods ,detection and applications in various mechanical fields of engineering. Also,study of acoustics mainly Sabine's formula gives awareness about reverberation ,echo and gives requirements of acoustically good hall.This study of Acoustics is useful in civil Engineering.		
58	<b>Acoustics:</b> Introduction,		
59	Requirements of acoustically good hall		
60	Reverberation, Reverberation time		
61	Sabine's formula (Derivation using growth and decay method) -		
		<b>From</b>	Lecture interspersed



62	Absorption coefficient--- first part Sabine's formula (Derivation using growth and decay method) - Absorption coefficient--- second part	12-03-2021  To  25-03-2021	with discussions
63	Sabine's formula (Derivation using growth and decay method) - Absorption coefficient--- Review		
64	Absorption coefficient and its determination		
65	Factors affecting acoustics of buildings and their remedial measures.		
66	<b>Ultrasonics:</b> Introduction, Properties		
67	Production by magnetostriction and piezoelectric methods, Detection		Lecture interspersed with discussions
68	Acoustic grating		
69	Non Destructive Testing – pulse echo system through transmission mode.		
70	Non Destructive Testing – pulse echo system through reflection modes, Applications		
UNIT-IV	<b>CRYSTALLOGRAPHY AND X-RAY DIFFRACTION</b>  <b>CEO5:</b> To Understand crystallography and X-ray diffraction used to know the crystal systems and for the determination of crystal structures, Packing fraction and Coordination number. Also, Bragg's law gives interplanar separation and bragg's angle in crystal structure.		
71	<b>Crystallography:</b> Space lattice, Basis, Unit Cell	From  26-03-2021  To  03-04-2021	Lecture interspersed with discussions
72	lattice parameters , Bravais Lattice , crystal systems (3D)		
73	coordination number , Packing fraction of SC		
74	Packing fraction of BCC & FCC		
75	Miller indices – separation between successive (hkl) planes.		Lecture interspersed with discussions
76	<b>X- ray diffraction:</b> Bragg's law		
77	X-ray Diffractometer		
78	Crystal structure determination by Laue's		
79	Crystal structure determination by powder methods		

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**TENTATIVE LESSON PLAN: R201104  
ENGINEERING DRAWING**

<b>Course Title: ENGINEERING DRAWING</b>		<b>Course Code: R201104</b>
<b>Section : Sec I</b>	<b>Date : 06/01/2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By: R. KIRAN KUMAR</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs**

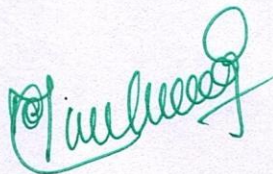
S.NO	TOPIC	Date	Mode of Delivery
<b>UNIT-I INTRODUCTION TO DRAWING</b> <b>CO1:Able to draw the polygons, curves, scales</b> <b>TB:“Engineering Drawing”, by N.D. Butt &amp;V.M. Panchal, Chariot Publishing House, Anand. 49<sup>th</sup> Edition – 2006.</b>			
1	Introduction	From: 11/01/2021  To: 30/01/2021	Lecture interspersed with discussions
2	Lettering and Dimensioning		
3	Geometrical constructions, Polygons		
4	Ellipse		
5	Parabola and Hyperbola		
6	Cycloids		
7	Involutes		
8	Vernier scales		
9	Plain scales, diagonal scale		
<b>UNIT-II PROJECTIONS OF STRAIGHT LINES</b> <b>CO2:Able to draw the projections of points and lines parallel to one plane and to other plan and inclined to both the planes and its traces.</b> <b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
10	Projections of points in various quadrants	From: 01/02/2021  To: 06/02/2021	Lecture interspersed with discussions
11	Projections of lines, lines parallel either of the reference planes and inclined to both planes		
12	True length determination and true angle of inclination		
13	Traces (inclined to both planes)		
<b>UNIT-III PROJECTIONS OF PLANES</b> <b>CO3:Able to identify the different plans and draw the projections of the plane inclined to both the planes.</b> <b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
14	Projection of plane (parallel to one plane and perpendicular to other plane)	From: 08/02/2021  To: 13/03/2021	Lecture interspersed with discussions
15	Projection of plane (parallel to one plane and inclined to other plane)		
16	Projection of plane (inclined to both plane)		
17	Projection of plane (inclined to both plane)		
<b>UNIT-IV PROJECTIONS OF SOLIDS</b> <b>CO4:Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.</b> <b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			

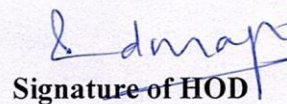


18	Projection of solids (Prisms, Cylinder)	From: 15/03/2021 To: 03/04/2021	Lecture interspersed with discussions
19	Projection of solids (Prisms, Cylinder)		
20	Projection of solids (Pyramids, cone)		
21	Projection of solids (Pyramids, cone)		
<b>UNIT-V ISOMETRIC PROJECTIONS</b>			
<b>CO5:Able to represent and convert the isometric view to orthographic view and orthographic view to isometric view.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
22	Conversion of isometric views to orthographic views	From: 10/04/2021 To: 24/04/2021	Lecture interspersed with discussions
23	Conversion of isometric views to orthographic views		
24	Conversion of orthographic views to isometric views		
25	Computer Aided Design, Drawing practice using Auto CAD		



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## TENTATIVE LESSON PLAN: CE R201105

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

Tools: Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT –I Introduction:</b>			
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 Gangopadhyay, Oxford University press			
1	Introduction	8-1-21	Lecture interspersed with discussion
2	Definition of geology and various Branches of Geology	11-1-21	
3	Allied Branches of geology	12-1-21	
4	Importance of Geology in Civil Engineering with case studies	20-1-21	
5	Weathering	22-1-21	
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	
11	weathering process of Rock and their development	1-2-21	
12	River valley development	2-2-21	
<b>UNIT –II Mineralogy And Petrology</b>			
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 Gangopadhyay, Oxford University press			
13	Mineralogy And Petrology	3-2-21	Lecture interspersed with discussion
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	



25	structures Pyrolusite, Graphite, Chromite,	18-2-21
26	Magnetite And Bauxite	20-2-21
27	Classification, structures textures and forms of Igneous rocks	22-2-21
28	Metamorphic rocks, and their megascopic study of granite varieties, (pink, gray, green).	23-2-21
29	Pegmatite	24-2-21
30	,Dolerite, Basalt etc.,	25-2-21
31	Shale, Sand Stone, Lime Stone,	26-2-21
32	Laterite, Quartzite, Gneiss,	27-2-21
33	Schist, Marble, Khondalite	1-3-21
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 structures	3-3-21
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	Lecture interspersed with discussions
43	Geological controls of Ground Water Movement	22-3-21	
44	Ground Water Exploration Techniques	23-3-21	
45	Earthquakes And Land Slides: Terminology	24-3-21	
46	Classification, causes and effects	25-3-21	
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
<b>UNIT -V : Geology of Dams, Reservoirs And Tunnels:</b> CO6 The student will be able to understand Investigate the project site for mega/mini civil engineering projects.Site selection for mega engineering projects like Dams, Tunnels, disposal sites etc... <b>T1 Engineering Geology, N. Chenn Kesavulu, Laxmi Publications,</b> <b>T2. Engineering Geology, Subinoy Gangopadhay, Oxford University press</b>		
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

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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : EEE</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : B.V.RAMAKRISHNA RAO</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS</b> <b>CO1: utilize mean value theorems to real life problems</b> <b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		
<b>UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE</b> <b>CO2: Solve the differential equations related to various engineering fields</b> <b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		
<b>UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER</b>			



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

**UNIT-IV PARTIAL DIFFERENTIATION****CO4: Familiarize 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	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
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: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>			
<b>Section : EEE</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>	
<b>Revision No : 00</b>	<b>Prepared By: Yellamanda Vusa</b>	<b>Approved By : HOD</b>	
<b>Tools: Black board</b>			
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	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	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



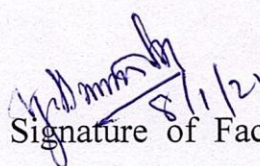
	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

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

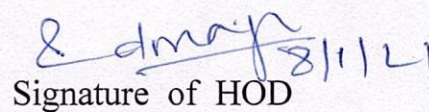
**CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing**

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

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

  
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## TENTATIVE LESSON PLAN

### R201104 ENGINEERING DRAWING

<b>Course Title: ENGINEERING DRAWING</b>		<b>Course Code: R201104</b>
<b>Section : EEE</b>	<b>Date: 06-01-2021.</b>	<b>Page No: 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By: P. Kishorekumar</b>	<b>Approved By : HOD</b>


**Tools: Black board, PPTs**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I INTRODUCTION TO DRAWING</b>			
<b>CO1:Able to draw the polygons, curves.</b>			
<b>TB: "Engineering Drawing", by N.D. Butt &amp; V.M. Panchal, Chariot Publishing House, Anand. 49<sup>th</sup> Edition – 2006.</b>			
1	Introduction	11-01-2021	Lecture interspersed with discussions
2	Lettering and Dimensioning	14-01-2021	
3	Geometrical constructions	18-01-2021	
4	Parabola, Ellipse and Hyperbola	21-01-2021	
5	Polygons	25-01-2021	
6	Cycloids	28-01-2021	
7	Involutes	01-02-2021	
8	Vernier scales	04-02-2021	
9	Plain scales, diagonal scale	08-02-2021	
<b>UNIT-II INTRODUCTION TO ORTHOGRAPHIC PROJECTIONS</b>			
<b>CO2:Able to draw the scales, projections of points and lines parallel to one plane and to other plan.</b>			
<b>TB: "Engineering Drawing", by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
10	Projections of points in various quadrants	11-02-2021	Lecture interspersed with discussions
11	Projections of lines, lines parallel either of the reference planes	15-02-2021	
12	Determination of true lengths,	18-02-2021	
13	Angle of inclination and traces.	22-02-2021	
<b>UNIT-III PROJECTIONS OF PLANES</b>			
<b>CO3:Able to draw the projections of lines inclined to both the planes and its traces.</b>			
<b>TB: "Engineering Drawing", by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
14	Projection of plane (parallel to one plane and perpendicular to other plane)	25-02-2021	Lecture interspersed with discussions
15	Projection of plane (parallel to one plane and inclined to other plane)	01-03-2021	
16	Projection of plane (inclined to both plane)	04-03-2021	
17	Projection of plane (inclined to both plane)	08-03-2021	
<b>UNIT-IV PROJECTIONS OF SOLIDS</b>			
<b>CO4:Able to identify the different plans and draw the projections of the plane inclined to both the planes.</b>			
<b>TB: "Engineering Drawing", by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
18	Projections of Solids	11-03-2021	Lecture interspersed
19	Prisms, Pyramids	15-03-2021	



20	Cones with the axis inclined to both the planes	22-03-2021	with discussions
21	Cylinders with the axis inclined to both the planes	25-03-2021	
<b>UNIT-V Conversion of isometric views to orthographic views</b>			
<b>CO5:Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
22	Isometric views to orthographic views	29-03-2021	Lecture interspersed with discussions
23	Orthographic views to isometric views.	01-04-2021	
24	Computer Aided Design	05-04-2021	
25	Drawing practice using Auto CAD	08-04-2021	
26	Creating 2D&3D drawings	12-04-2021	

  
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## TENTATIVE LESSON PLAN: R201109

<b>Course Title: MATHEMATICS - II</b>		
<b>Section : EEE</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : S.KALPANA</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: SOLVING SYSTEM OF LINEAR EQUATIONS, EIGEN VALUES AND EIGEN VECTORS</b> <b>CO1: solve system of linear algebraic equations using Gauss elimination, Gauss Jordan, Gauss Seidel (L3)</b> <b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
1	Introduction to matrices	From 06-01-2021 To 23-01-2021	Lecture interspersed with discussions
2	Rank of matrix- definition, properties		
3	Problems on rank by Echelon form		
4	Rank by normal form		
5	PAQ form problems		
6	Homogeneous system $AX=0$		
7	Non Homogeneous system $AX=B$		
8	Problems on rank method		
9	Gauss Elimination method		
10	Eigen values – definition		
11	Properties of Eigen values		
12	Properties of Eigen values		
13	Problems on finding eigen values, vectors		
14	Problems on finding eigen values, vectors		
<b>UNIT – II:, CALEY-HAMILTON THEOREM, QUADRATIC FORMS</b> <b>CO2: Develop the use of matrix algebra techniques that is needed by engineers for practical applications (L6)</b> <b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
15	Caley Hamilton theorem, verification, problems		



16	Finding inverse and power of a matrix by caley Hamilton theorem	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
17	Diagonalization – problems		
18	Quadratic forms – definition, examples		
19	Matrix form of a quadratic form		
20	Canonical form of a quadratic form		
21	Methods of reducing a QF in to canonical form		
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: Evaluate approximating the roots of polynomial and transcendental equations by different algorithms (L5)**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

26	Introduction	From: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
27	Method – 1: Bisection method		
28	Problems		
30	Method – 2: Regula falsi method		
31	Problems		
33	Method – 3: Iteration method		
34	Problems		
35	Method – 4: Newton Raphson method		
36	Problems		
37	Newton Raphson method simultaneous equations		
38	Gauss Jacobi Method		
39	Gauss Seidal Method		
40	problems		

**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**

41	Introduction: Forward and Backward Differences		
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42	Newton's Forward interpolation formula	From: 08-03-2021  To: 27-03-2021	Lecture interspersed with discussions
43	Problems		
44	Newton's Backward interpolation formula		
45	Problems		
46	Gauss Forward interpolation formula – Problems		
47	Problems		
48	Gauss Backward interpolation formula – Problems		
49	Problems		
50	Lagranges interpolation formula – Problems		
51	Problems		
52	Operators		
<b>UNIT – V: NUMERICAL INTEGRATION AND SOLUTION OF ORDINARY DIFFERENTIAL EQUATION</b>			
<b>CO5: Apply different algorithms for approximating the solutions of ordinary differential equations to its analytical computations (L3)</b>			
<b>TB: “Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
53	Trapezoidal rule	From 29-03-2021 To 17-04-2021	Lecture interspersed with discussions
54	Simpson's 1/3 rule		
55	Problems		
56	Simpson's 3/8 rule		
57	Taylor's series method		
58	Problems		
59	Picard's method of successive approximation		
60	Euler's method		
61	Euler's modified method		
62	Problems		
63	Runge kutta method		
64	Problems		

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**TENTATIVE LESSON PLAN: 1R201110**

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

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Creating and running Programs	8/1/21	Lecture Interspersed With discussions
2	Computer Numbering System	9/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	
5	C Programs, Identifiers	19/1/21	
6	Types, Variable	20/1/21	
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	
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	<b>Tutorial</b>	4/2/21	
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	5/2/21	Lecture interspersed with
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	
23	Two Way Selection	10-12/2/21	
24	Multiway Selection	13/2/21	
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	<b>Tutorial</b>	26/2/21	
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>

**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**

36	Concepts, Using Array in C	27/2/21	Lecture interspersed with discussions
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	
47	The Type Definition (Type def)	16/3/21	
48	Enumerated Types	17/3/21	
49	Structure	18-20/3/21	
50	Unions	22-25/3/21	
51	Programming Application	26-31/3/21	
52	<b>Tutorial</b>		

**UNIT-IV Pointers**

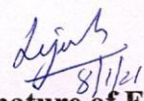
**CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.**

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

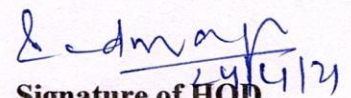
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	1/4/21	Lecture interspersed
54	Pointers to pointers	2/4/21	
55	Compatibility, L value and R value	3/4/21	
56	Arrays, and Pointers	5/4/21	
57	Pointer Arithmetic and Arrays	6/4/21	
58	Memory Allocation Function	7/4/21	



59	Array of Pointers	8/4/21	with discussions
60	Programming Application	9/4/21	
61	Processor Commands	10/4/21	
62	<b>Tutorial</b>		
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Designing, Structured Programs	12/4/21	Lecture interspersed with discussions
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		
71	Passing an Array to Function	19/4/21	
72	Files, Streams		
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	<b>Tutorial</b>	24/4/21	

  
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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : MECH</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : K.BASAVARAJU</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1:utilize mean value theorems to real life problems**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



<b>UNIT-III: LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER</b>			
<b>CO3: Solve the differential equations related to various engineering fields</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
24	Linear DE of constant coefficients	From: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$		
26	$Q(x) = \sin ax \text{ or } \cos ax$		
27	$Q(x) = x^n$		
28	$Q(x) = e^{ax}V(x)$		
29	$Q(x) = xV(x)$		
30	$Q(x) = x^n \sin ax \text{ or } \cos ax$		
31	Method of variation of parameters		
32	Applications: LCR Circuit		
<b>UNIT-IV PARTIAL DIFFERENTIATION</b>			
<b>CO4: Familiarize with functions of several variables which is useful in optimization</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
33	Homogeneous function; Euler's Theorem	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
39	Maxima minima of two variables		
40	Langranges method		
<b>UNIT-V: MULTIPLE INTEGRALS</b>			
<b>CO5: Apply double integration techniques in evaluating areas bounded by region</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
41	Introduction	From: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : MECH</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: N. Gayathri</b>	<b>Approved By : HOD</b>

**Tools: Black board**

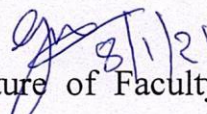
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	

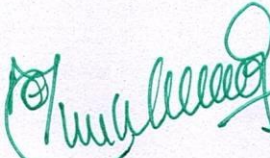


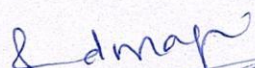
16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> Use of articles	05-02-21	
19	Bosom Friend Hira Bansode	08-02-21	
20	Long Answers	10-02-21	
21	Short Answers	10-02-21	
<b>UNIT-III: Stephen Hawking-Positivity “Benchmark”, Shakespeare’s Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	
<b>UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou</b>			
<b>CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing</b>			
<b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
41	<b>Stay Hungry-Stay foolish</b>	30-03-21	Lecture interspersed with discussions
42	<b>Listening</b> Identifying key terms	01-04-21	
43	<b>Speaking:</b> Formal oral presentations	05-04-21	
44	<b>Reading:</b> Reading for comprehension	08-04-21	
45	<b>Reading for Writing:</b> Writing academic proposals	09-04-21	
46	<b>Vocabulary:</b> Technical vocabulary	10-04-21	
47	<b>Grammar:</b> Editing short texts	12-04-21	

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# TENTATIVE LESSON PLAN: R201103

Course Title: Engineering Physics			
Section :ME		Date :08.01.2021	Page No :00
Revision No :00		Prepared By:B.NAGA JYOTHIRMAI	Approved By : HOD
Tools:			
No. of Periods	TOPIC	DATE	Mode of Delivery
UNIT-I	<b>WAVE OPTICS</b> <b>CEO1:</b> To identify the importance of the optical phenomenon i.e. interference, diffraction and polarization related to its Engineering applications.		Lecture interspersed with discussions
1	<b>INTERFERENCE:</b> Introduction	<b>From:</b>  <b>08/01/2021</b>  <b>To:</b>  <b>30/01/2021</b>	
2	Principle of Superposition		
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	<b>Diffraction:</b> Introduction		
11	Fresnel and Fraunhofer Diffraction		
12	Fraunhofer diffraction at single slit		
13	Fraunhofer diffraction at single slit		
14	Fraunhofer diffraction at Double Slit		
15	Fraunhofer diffraction at N-Slits		
16	Grating Equation		
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	<b>Polarization :</b> Introduction		Lecture interspersed with discussions
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Double Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates		
26	Problems		
UNIT-II	<b>LASERS AND FIBER OPTICS</b> <b>CEO2:</b> Understand the mechanism of stimulated emission of light, utilization of lasers as coherent light sources for low and high energy applications, study of propagation of light through optical fibers and their implications in optical communications.		Lecture interspersed with discussions
27	<b>Lasers :</b> Introduction	<b>From:</b>  <b>01-02-2021</b>	
28	Characteristics of Laser		
29	Spontaneous and Stimulated emission		
30	Einstein's Coefficients		
31	Population Inversion, Lasing action		



32	Pumping Mechanism-Pumping method	<b>To:</b> <b>13-02-2021</b>	
33	Ruby Laser		
34	Helium Neon Laser		
35	Applications of Lasers		
36	<b>Fiber Optics:</b> 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		
<b>UNIT-III</b>	<b>ENGINEERING MATERIALS</b>	<b>From:</b> <b>22-02-2021</b> <b>To</b> <b>10-03-2021</b>	Lecture interspersed with discussions
	<b>CEO3:</b> To explain the significant concepts of dielectric and magnetic materials that leads to potential applications in the emerging micro devices.		
43	<b>Dielectric Materials:</b> Introduction,		
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		
50	<b>Magnetic Materials:</b> Introduction		
51	Magnetic dipole moment, Magnetization, Magnetic susceptibility and permeability		
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		
<b>UNIT-IV</b>	<b>ACOUSTICS AND ULTRASONICS</b>	<b>From</b> <b>12-03-2021</b>	Lecture interspersed with
	<b>CEO4:</b> To study ultrasonics productions methods ,detection and applications in various mechanical fields of engineering. Also,study of acoustics mainly Sabine's formula gives awareness about reverberation ,echo and gives requirements of acoustically good hall.		
58	<b>Acoustics:</b> Introduction,		
59	Requirements of acoustically good hall		
60	Reverberation, Reverberation time		
61	Sabine's formula (Derivation using growth and decay method) - Absorption coefficient--- first part		



62	Sabine's formula (Derivation using growth and decay method) - Absorption coefficient--- second part	<b>To</b> <b>25-03-2021</b>	discussions
63	Sabine's formula (Derivation using growth and decay method) - Absorption coefficient--- Review		
64	Absorption coefficient and its determination		
65	Factors affecting acoustics of buildings and their remedial measures.		
66	<b>Ultrasonics:</b> Introduction, Properties		
67	Production by magnetostriction and piezoelectric methods, Detection		
68	Acoustic grating		
69	Non Destructive Testing – pulse echo system through transmission mode.		
70	Non Destructive Testing – pulse echo system through reflection modes, Applications		
UNIT-IV	<b>CRYSTALLOGRAPHY AND X-RAY DIFFRACTION</b>  <b>CEOS:</b> To Understand crystallography and X-ray diffraction used to know the crystal systems and for the determination of crystal structures, Packing fraction and Coordination number. Also, Bragg's law gives interplanar separation and bragg's angle in crystal structure.		
71	<b>Crystallography:</b> Space lattice, Basis, Unit Cell	<b>From</b> <b>26-03-2021</b>  <b>To</b> <b>03-04-2021</b>	
72	lattice parameters ,Bravais Lattice ,crystal systems (3D)		
73	coordination number , Packing fraction of SC		
74	Packing fraction of BCC& FCC		
75	Miller indices – separation between successive (hkl) planes.		
76	<b>X- ray diffraction:</b> Bragg's law		
77	X-ray Diffractometer		
78	Crystal structure determination by Laue's		
79	Crystal structure determination by powder methods		

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**TENTATIVE LESSON PLAN : R201104  
ENGINEERING DRAWING**


<b>Course Title: ENGINEERING DRAWING</b>		<b>Course Code: R201104</b>
<b>Section : Sec I</b>	<b>Date : 06/01/2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By: R. KIRAN KUMAR</b>	<b>Approved By : HOD</b>

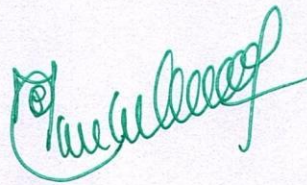
**Tools: Black board, PPTs**


S.NO	TOPIC	Date	Mode of Delivery
<b>UNIT-I INTRODUCTION TO DRAWING</b>			
<b>CO1:Able to draw the polygons, curves, scales</b>			
<b>TB:“Engineering Drawing”, by N.D. Butt &amp;V.M. Panchal, Chariot Publishing House, Anand. 49<sup>th</sup> Edition – 2006.</b>			
1	Introduction	From: 11/01/2021  To: 30/01/2021	Lecture interspersed with discussions
2	Lettering and Dimensioning		
3	Geometrical constructions, Polygons		
4	Ellipse		
5	Parabola and Hyperbola		
6	Cycloids		
7	Involutes		
8	Vernier scales		
9	Plain scales, diagonal scale		
<b>UNIT-II PROJECTIONS OF STRAIGHT LINES</b>			
<b>CO2:Able to draw the projections of points and lines parallel to one plane and to other plan and inclined to both the planes and its traces.</b>			
<b>T TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
10	Projections of points in various quadrants	From: 01/02/2021  To: 06/02/2021	Lecture interspersed with discussions
11	Projections of lines, lines parallel either of the reference planes and inclined to both planes		
12	True length determination and true angle of inclination		
13	Traces (inclined to both planes)		
<b>UNIT-III PROJECTIONS OF PLANES</b>			
<b>CO3:Able to identify the different plans and draw the projections of the plane inclined to both the planes.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
14	Projection of plane (parallel to one plane and perpendicular to other plane)	From: 08/02/2021  To: 13/03/2021	Lecture interspersed with discussions
15	Projection of plane (parallel to one plane and inclined to other plane)		
16	Projection of plane (inclined to both plane)		
17	Projection of plane (inclined to both plane)		
<b>UNIT-IV PROJECTIONS OF SOLIDS</b>			
<b>CO4:Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			



18	Projection of solids (Prisms, Cylinder)	From: 15/03/2021	Lecture interspersed with discussions
19	Projection of solids (Prisms, Cylinder)		
20	Projection of solids (Pyramids, cone)	To: 03/04/2021	
21	Projection of solids (Pyramids, cone)		
<b>UNIT-V ISOMETRIC PROJECTIONS</b>			
<b>CO5:Able to represent and convert the isometric view to orthographic view and orthographic view to isometric view.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
22	Conversion of isometric views to orthographic views	From: 10/04/2021	Lecture interspersed with discussions
23	Conversion of isometric views to orthographic views		
24	Conversion of orthographic views to isometric views	To: 24/04/2021	
25	Computer Aided Design, Drawing practice using Auto CAD		

  
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**TENTATIVE LESSON PLAN: 1R201110**

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

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Creating and running Programs	08/1/21	Lecture Interspersed With discussions
2	Computer Numbering System	09/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	
5	C Programs, Identifiers	19/1/21	
6	Types, Variable	20/1/21	
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	
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	
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	5/2/21	Lecture interspersed with discussions
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	
23	Two Way Selection	12/2/21	
24	Multiway Selection	13/2/21	
25	More Standard Functions	15/2/21	
26	Concept of Loop	16/2/21	
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	25/2/21	
33	Programming Example		
35	Tutorial	26/2/21	
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>UNIT-III Arrays, String, Enum, Structure, Unions</b>			
<b>CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
36	Concepts, Using Array in C	27/2/21	Lecture interspersed with discussions
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	
47	The Type Definition (Type def)	16/3/21	
48	Enumerated Types	17/3/21	
49	Structure	18/3/21	
50	Unions	22/3/21	
51	Programming Application	26/3/21	
52	Tutorial		
<b>UNIT-IV Pointers</b>			
<b>CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	1/4/21	Lecture interspersed with discussions
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	
58	Memory Allocation Function	7/4/21	
59	Array of Pointers	8/4/21	
60	Programming Application	9/4/21	
61	Processor Commands	10/4/21	
62	Tutorial		

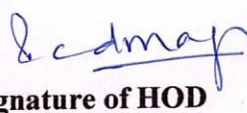


**UNIT-V Files and Functions****CO5: To assimilate about File I/O and significance of functions.****TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE**

63	Designing, Structured Programs	12/4/21	Lecture interspersed with discussions
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		
71	Passing an Array to Function	19/4/21	
72	Files, Streams	20/4/21	
73	Standard Library Input / Output Functions		
74	Formatting Input / Output Functions		
75	Character Input / Output Functions		
76	Text versus Binary Streams	23/4/21	
77	Functions for Files		
78	Converting File Type	24/4/21	
79	Tutorial		

  
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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : ECE-A</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : S.KALPANA</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1:utilize mean value theorems to real life problems**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

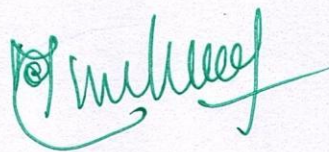
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton 's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

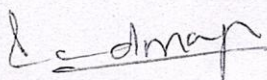
**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



<b>CO3: Solve the differential equations related to various engineering fields</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
24	Linear DE of constant coefficients	From:	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$	08-02-2021	
26	$Q(x) = \sin ax$ or $\cos ax$	To:	
27	$Q(x) = x^n$	13-02-2021	
28	$Q(x) = e^{ax}V(x)$	&	
29	$Q(x) = xV(x)$	From:	
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	
33	Simple Harmonic Motion		
<b>UNIT-IV PARTIAL DIFFERENTIATION</b>			
<b>CO4: Familiarize with functions of several variables which is useful in optimization</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
34	Homogeneous function; Euler's Theorem	From:	Lecture interspersed with discussions
35	Total Derivative; Chain rule	08-03-2021	
36	Taylor's mean value theorems	To:	
37	Maclaurin's series	27-03-2021	
38	Jacobians, formulae		
39	Functional dependence		
40	Maxima minima of two variables		
41	Langranges method		
<b>UNIT-V: MULTIPLE INTEGRALS</b>			
<b>CO5: Apply double integration techniques in evaluating areas bounded by region</b>			
<b>TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications</b>			
42	Introduction	From:	Lecture interspersed with discussions
43	Double integrals	29-03-2021.	
44	Triple integrals	To:	
45	Change of order of integration	12-04-2021	
46	Change of variable		
47	Applications: Finding areas		
48	Finding volumes		

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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : ECE-B</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : B.V.RAMAKRISHNA RAO</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS</b>			
<b>CO1:utilize mean value theorems to real life problems</b>			
<b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		
<b>UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE</b>			
<b>CO2: Solve the differential equations related to various engineering fields</b>			
<b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		
<b>UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER</b>			



**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**

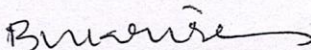
24	Linear DE of constant coefficients	From: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$		
26	$Q(x) = \sin ax \text{ or } \cos ax$		
27	$Q(x) = x^n$		
28	$Q(x) = e^{ax}V(x)$		
29	$Q(x) = xV(x)$		
30	$Q(x)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

**UNIT-IV PARTIAL DIFFERENTIATION****CO4: Familiarize with functions of several variables which is useful in optimization****TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications**

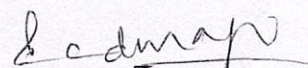
33	Homogeneous function; Euler's Theorem	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
39	Maxima minima of two variables		
40	Langranges 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: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

  
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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : ECE-A</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: Yellamanda Vusa</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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 Societyll, Pearson Publications**

24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	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 Societyll, Pearson Publications**

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



	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> 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, Pearson Publications**

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

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8/1/21  
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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>			
<b>Section : ECE-B</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>	
<b>Revision No : 00</b>	<b>Prepared By: Yellamanda Vusa</b>	<b>Approved By : HOD</b>	
<b>Tools: Black board</b>			
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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 Societyll, Pearson Publications**

24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	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 Societyll, Pearson Publications**

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



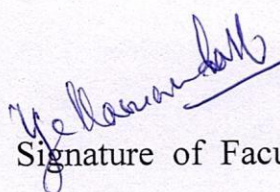
	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

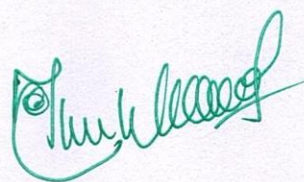
**UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou**

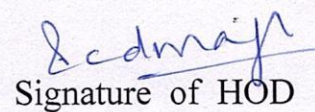
**CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing**

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

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

  
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## TENTATIVE LESSON PLAN: R201104 ENGINEERING DRAWING

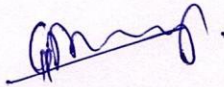
Course Title: ENGINEERING DRAWING		Course Code: R201104
Section : ECE-A	Date: 06-01-2021.	Page No: 01 of 02
Revision No : 00	Prepared By: G. Durga Prasad	Approved By : HOD

Tools: Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I INTRODUCTION TO DRAWING</b>			
CO1: Able to draw the polygons, curves.			
TB: "Engineering Drawing", by N.D. Butt & V.M. Panchal, Chariot Publishing House, Anand. 49 <sup>th</sup> Edition – 2006.			
1	Introduction	12-01-2021	Lecture interspersed with discussions
2	Lettering and Dimensioning	19-01-2021	
3	Geometrical constructions	21-01-2021	
4	Parabola, Ellipse and Hyperbola	28-01-2021	
5	Polygons	02-02-2021	
6	Cycloids	04-02-2021	
7	Involutes	09-02-2021	
8	Vernier scales	11-02-2021	
9	Plain scales, diagonal scale	16-02-2021	
<b>UNIT-II INTRODUCTION TO ORTHOGRAPHIC PROJECTIONS</b>			
CO2: Able to draw the scales, projections of points and lines parallel to one plane and to other plan.			
TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2 <sup>nd</sup> Edition – 2015.			
10	Projections of points in various quadrants	18-02-2021	Lecture interspersed with discussions
11	Projections of lines, lines parallel either of the reference planes	23-02-2021	
12	Determination of true lengths,	25-02-2021	
13	Angle of inclination and traces.	02-03-2021	
<b>UNIT-III PROJECTIONS OF PLANES</b>			
CO3: Able to draw the projections of lines inclined to both the planes and its traces.			
TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2 <sup>nd</sup> Edition – 2015.			
14	Projection of plane (parallel to one plane and perpendicular to other plane)	04-03-2021	Lecture interspersed with discussions
15	Projection of plane (parallel to one plane and inclined to other plane)	09-03-2021	
16	Projection of plane (inclined to both plane)	16-03-2021	
17	Projection of plane (inclined to both plane)	18-03-2021	
<b>UNIT-IV PROJECTIONS OF SOLIDS</b>			
CO4: Able to identify the different plans and draw the projections of the plane inclined to both the planes.			
TB: "Engineering Drawing", by Agarwal & Agarwal, Tata McGraw Hill Publishers, 2 <sup>nd</sup> Edition – 2015.			
18	Projections of Solids	23-03-2021	Lecture interspersed
19	Prisms, Pyramids	25-03-2021	

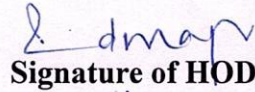


20	Cones with the axis inclined to both the planes	30-03-2021	with discussions
21	Cylinders with the axis inclined to both the planes	01-04-2021	
<b>UNIT-V Conversion of isometric views to orthographic views</b>			
<b>CO5: Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.</b>			
<b>TB: "Engineering Drawing", by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition - 2015.</b>			
22	Isometric views to orthographic views	06-04-2021	Lecture interspersed with discussions
23	Orthographic views to isometric views.	08-04-2021	
24	Computer Aided Design	20-04-2021	
25	Drawing practice using Auto CAD	20-04-2021	
26	Creating 2D&3D drawings	22-04-2021	



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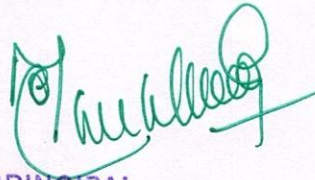
Date: 06/11/21



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## TENTATIVE LESSON PLAN

### R201104 ENGINEERING DRAWING

<b>Course Title: ENGINEERING DRAWING</b>		<b>Course Code: R201104</b>
<b>Section : ECE-B</b>	<b>Date: 06-01-2021.</b>	<b>Page No: 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By: P. Kishorekumar</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I INTRODUCTION TO DRAWING</b>			
<b>CO1:Able to draw the polygons, curves.</b>			
<b>TB:“Engineering Drawing”, by N.D. Butt &amp;V.M. Panchal, Chariot Publishing House, Anand. 49<sup>th</sup> Edition – 2006.</b>			
1	Introduction	11-01-2021	Lecture interspersed with discussions
2	Lettering and Dimensioning	14-01-2021	
3	Geometrical constructions	18-01-2021	
4	Parabola, Ellipse and Hyperbola	21-01-2021	
5	Polygons	25-01-2021	
6	Cycloids	28-01-2021	
7	Involutes	01-02-2021	
8	Vernier scales	04-02-2021	
9	Plain scales, diagonal scale	08-02-2021	
<b>UNIT-II INTRODUCTION TO ORTHOGRAPHIC PROJECTIONS</b>			
<b>CO2:Able to draw the scales, projections of points and lines parallel to one plane and to other plan.</b>			
<b>TB: “Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
10	Projections of points in various quadrants	11-02-2021	Lecture interspersed with discussions
11	Projections of lines, lines parallel either of the reference planes	15-02-2021	
12	Determination of true lengths,	18-02-2021	
13	Angle of inclination and traces.	22-02-2021	
<b>UNIT-III PROJECTIONS OF PLANES</b>			
<b>CO3:Able to draw the projections of lines inclined to both the planes and its traces.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
14	Projection of plane (parallel to one plane and perpendicular to other plane)	25-02-2021	Lecture interspersed with discussions
15	Projection of plane (parallel to one plane and inclined to other plane)	01-03-2021	
16	Projection of plane (inclined to both plane)	04-03-2021	
17	Projection of plane (inclined to both plane)	08-03-2021	
<b>UNIT-IV PROJECTIONS OF SOLIDS</b>			
<b>CO4:Able to identify the different plans and draw the projections of the plane inclined to both the planes.</b>			
<b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
18	Projections of Solids	11-03-2021	Lecture interspersed
19	Prisms, Pyramids	15-03-2021	



20	Cones with the axis inclined to both the planes	22-03-2021	with discussions
21	Cylinders with the axis inclined to both the planes	25-03-2021	
<b>UNIT-V Conversion of isometric views to orthographic views</b> <b>CO5:Able to identify the basic solids and draw the projections of the solids inclined to one of the planes.</b> <b>TB:“Engineering Drawing”, by Agarwal &amp; Agarwal, Tata McGraw Hill Publishers, 2<sup>nd</sup> Edition – 2015.</b>			
22	Isometric views to orthographic views	29-03-2021	Lecture interspersed with discussions
23	Orthographic views to isometric views.	01-04-2021	
24	Computer Aided Design	05-04-2021	
25	Drawing practice using Auto CAD	08-04-2021	
26	Creating 2D&3D drawings	12-04-2021	

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**TENTATIVE LESSON PLAN: R201110**

<b>Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C</b>		
<b>Section : Sec A</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By : CH SIVA RAJESH</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b> <b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Computer Systems	8-01-2021	Lecture Interspersed With discussions
2	Computing Environments	8-01-2021	
3	Computer languages	9-01-2021	
4	Creating and running Programs	9-01-2021	
5	Computer Numbering System	10-01-2021	
6	Storing Integers	12-01-2021	
7	Storing Real Numbers	18-01-2021	
8	C Programs, Identifiers	20-01-2021	
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	
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	<b>Tutorial</b>	6-2-2021	
<b>UNIT-II Operators, Selection and Repetition</b> <b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	6-02-2021	Lecture interspersed
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	
24	Multiway Selection	12-02-2021	



25	More Standard Functions	13-02-2021	with discussions
26	Concept of Loop	15-02-2021	
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	<b>Tutorial</b>	24-2-2021	
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>

**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**

36	Concepts, Using Array in C	25,26-02-2021	Lecture interspersed with discussions
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	
47	The Type Definition (Type def)	12-03-2021	
48	Enumerated Types	12-03-2021	
49	Structure	13-03-2021	
50	Unions	13-03-2021	
51	Programming Application	13-03-2021	
52	<b>Tutorial</b>	14-03-2021	

**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**

<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
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 interspersed with discussions
58	Memory Allocation Function	30-03-2021	
59	Array of Pointers	31-03-2021	
60	Programming Application	31-03-2021	
61	Processor Commands	1-04-2024	
62	<b>Tutorial</b>	1-04-2021	
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Files, Streams	15-04-2024	Lecture interspersed with discussions
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	
70	Designing, Structured Programs	3-04-2024	
71	Function in C	5-04-2024	
72	User Defined Functions	6-04-2024	
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	Recursion	13-04-2024	
78	<b>Tutorial</b>	15-04-2024	

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**TENTATIVE LESSON PLAN: 1R201110**

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

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Creating and running Programs	8/1/21	Lecture Interspersed With discussions
2	Computer Numbering System	9/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	
5	C Programs, Identifiers	19/1/21	
6	Types, Variable	20/1/21	
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	
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	<b>Tutorial</b>	4/2/21	
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	5/2/21	Lecture interspersed with
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	
23	Two Way Selection	10-12/2/21	
24	Multiway Selection	13/2/21	
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	<b>Tutorial</b>	26/2/21	
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>

**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**

36	Concepts, Using Array in C	27/2/21	Lecture interspersed with discussions
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	
47	The Type Definition (Type def)	16/3/21	
48	Enumerated Types	17/3/21	
49	Structure	18-20/3/21	
50	Unions	22-25/3/21	
51	Programming Application	26-31/3/21	
52	<b>Tutorial</b>		

**UNIT-IV Pointers**

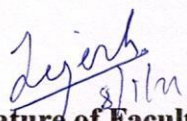
**CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.**

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

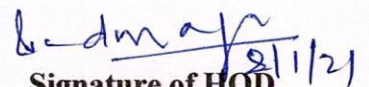
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	1/4/21	Lecture interspersed
54	Pointers to pointers	2/4/21	
55	Compatibility, L value and R value	3/4/21	
56	Arrays, and Pointers	5/4/21	
57	Pointer Arithmetic and Arrays	6/4/21	
58	Memory Allocation Function	7/4/21	



59	Array of Pointers	8/4/21	with discussions
60	Programming Application	9/4/21	
61	Processor Commands	10/4/21	
62	<b>Tutorial</b>		
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Designing, Structured Programs	12/4/21	Lecture interspersed with discussions
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		
71	Passing an Array to Function	19/4/21	
72	Files, Streams		
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	<b>Tutorial</b>	24/4/21	

  
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## TENTATIVE LESSON PLAN: R201115

<b>Course Title: APPLIED CHEMISTRY</b>			
<b>Section :ECE-A</b>	<b>Date : 8-1-2021</b>	<b>Page No : 1-3</b>	
<b>Revision No :00</b>	<b>Prepared By : B.SOWJANYA</b>	<b>Approved By : HOD</b>	
<b>Tools:</b>			
<b>No. of Periods:73</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>Unit – I: POLYMER TECHNOLOGY</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.) <b>CO1:</b> Importance of usage of plastics in household appliances and composites(FRP) in aerospace and automotive industries.			
1	Polymerisation:- Introduction-methods of polymerization	8-1-2021	Lecture interspersed with discussions
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	
6	Materials used in electronic gadgets, recycling of e-plastic waste	22-1-2021	
7	Elastomers:- Natural rubber-drawbacks-vulcanization	23-1-2021	
8	preparation, properties and applications of synthetic rubbers	25-1-2021	
9	(Buna S, thiokol and polyurethanes	27-1-2021	
10	Composite materials: Fiber reinforced plastics-	28-1-2021	
11	conducting polymers-	30-1-2021	
13	Biodegradable polymersbiopolymers	30-1-2021	
<b>Unit -II :ELECTROCHEMICAL CELLS AND CORROSION</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publicating Co.) <b>CO2:</b> Outline the basics for the construction of electrochemical cells, batteries and fuel cells. Understand the mechanism of corrosion and how it can be prevented.			
<b>1</b>	<b>Unit -II :ELECTROCHEMICAL CELLS</b>	3-2-2021	Lecture interspersed with discussions
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	
5	concentration cell-	6-2-2021	
6	construction of glass electrode	8-2-2021	
7	Batteries: Dry cell, Ni-Cd cells,	9-2-2021	
8	N-iMetal hydride cells, Li ion battery, zinc air cells	10-2-2021	
9	Fuel cells: H <sub>2</sub> -O <sub>2</sub> , CH <sub>3</sub> OH-O <sub>2</sub> ,	11-2-2021	
10	phosphoric acid, molten carbonate	12-2-2021	
11	<b>Corrosion</b> :-Definition-theories of corrosion	13-2-2021	



12	galvanic corrosion, differential aeration corrosion, stress corrosion,	15-2-2021	
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 Publishing Co.)

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

1	<b>Part I : Non-elemental semiconducting materials</b>	23-2-2021	Lecture interspersed with discussions
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	
5	<b>Part II: Nano materials:-</b> Introduction-sol-gel method-	22-3-2021	
6	characterization by BET, SEM and TEM methods	23-2021	
7	Applications of graphene-carbon nanotubes and fullerenes:	24-3-2021	
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 Publishing 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.	<b>Part A: SPECTROSCOPIC TECHNIQUES</b> Electromagnetic spectrum-UV	1-4-2021	Lecture interspersed with discussions
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	
5.	FT-IR (instrumentation and IR of some organic compounds, applications).	6-4-2021	
6.	Magnetic resonance imaging and CT scan (procedure	6-4-2021	



	& applications).		
7.	<b>Part B: NON CONVENTIONAL ENERGY SOURCES</b>	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	
<b>UNIT V: ADVANCED CONCEPTS/TOPICS IN CHEMISTRY</b> <b>Applied Chemistry”</b> by, Dr. Bharathi kumara Yallamanchili, VGS. <b>C05:</b> Outline the basics of computational chemistry and molecular switches.			
1	Computational chemistry: Introduction, Ab Initio studies Molecular switches	11-4-2021	Lecture interspersed with discussions
2.	characteristics of molecular motors and machines, Rotaxanes	12-4-2021	
3.	Catenanes as artificial molecular machines, prototypes	15-4-2021	
4.	linear motions in rotaxanes, an acid-base controlled molecular shuttle	16-4-2021	
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	

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## TENTATIVE LESSON PLAN: R201115

Course Title: APPLIED CHEMISTRY			
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
<b>UNIT – I: POLYMER TECHNOLOGY</b>			
<b>CO:</b> Analyze the different types of composite plastic materials and interpret the mechanism of conduction in conducting polymers			
1	Polymerisation:- Introduction-methods of polymerization	07-01-2021	Lecture Interspersed With Discussions
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	
6	Materials used in electronic gadgets, recycling of e-plastic waste	12-01-2021	
7	Elastomers:- Natural rubber-drawbacks-vulcanization	18-01-2021	
8	Preparation, properties and applications of synthetic rubbers	19-01-2021	
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	
<b>UNIT-II :ELECTROCHEMICAL CELLS AND CORROSION</b>			
<b>CO:</b> 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	Lecture
2	Electrochemical series and uses of series	25-01-2021	





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3	Standard hydrogen electrode, calomel electrode	28-01-2021	Interspersed With Discussions	
4		29-01-2021		
5	Concentration cell-	30-01-2021		
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 <sub>2</sub> -O <sub>2</sub> , CH <sub>3</sub> OH-O <sub>2</sub> ,	02-02-2021		
10	Phosphoric acid, molten carbonate	05-02-2021		
11	<b>Corrosion:-</b> Definition-theories of corrosion	06-02-2021		Lecture Interspersed With Discussions
12	Galvanic corrosion, differential aeration corrosion, stress corrosion,•	06-02-2021		
13	Waterline corrosion-passivity of metals-galvanic series	08-02-2021		
14	Factors influencing rate of corrosion-corrosion control	09-02-2021		
15	Protective coatings: Surface preparation, cathodic	09-02-2021		
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	<b>Part I : Non-elemental semiconducting materials</b>	12-02-2021	Lecture Interspersed With Discussions
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	
5	<b>Part II: Nano materials:-</b> Introduction-sol-gel method-	16-02-2021	
6	Characterization by BET, SEM and TEM methods	16-02-2021	
7	Applications of graphene-carbon nanotubes and fullerenes:	18-02-2021	
8	Types, preparation and applications Liquid	19-02-2021	





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	crystals		
9	Introduction-types-applications. Super conductors:-Type -I, Type II-characteristics and applications.	23-02-2021	
<b>UNIT IV: SPECTROSCOPIC TECHNIQUES &amp; NON CONVENTIONAL ENERGY SOURCES</b>			
<b>Cos:</b>			
<ul style="list-style-type: none"> <li>• <i>Analyze</i> the principles of different analytical instruments and their applications.</li> <li>• <i>Design</i> models for energy by different natural sources.</li> </ul>			
1.	<b>Part A: SPECTROSCOPIC TECHNIQUES</b> Electromagnetic spectrum-UV	01-03-2021	Lecture Interspersed With Discussions
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	
6.	Magnetic resonance imaging and CT scan (procedure & applications).	09-03-2021	
7.	<b>Part B: NON CONVENTIONAL ENERGY SOURCES</b>	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	
<b>UNIT V: ADVANCED CONCEPTS/TOPICS IN CHEMISTRY</b>			
<b>COs:</b> Obtain the knowledge of computational chemistry and molecular machines			
1	Computational chemistry: Introduction, Molecular modeling and docking	20-03-2021	Lecture Interspersed With Discussions
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	
5.	A molecular elevator	02-04-2021	
6.	An autonomous light-powered molecular motor	02-03-2021	
7.	Prototypes and molecular switches	01-03-2021	
8.	Acid-base controlled molecular shuttle	02-03-2021	

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## TENTATIVE LESSON PLAN: R201101

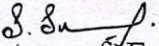
<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : CSM</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : S.SUMAN</b>	<b>Approved By : HOD</b>

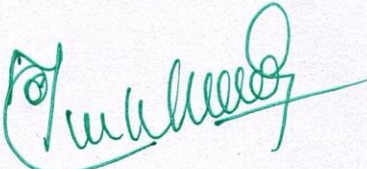
**Tools: Black board**

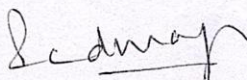
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS</b>			
<b>CO1:utilize mean value theorems to real life problems</b>			
<b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		
<b>UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE</b>			
<b>CO2: Solve the differential equations related to various engineering fields</b>			
<b>TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications</b>			
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		
<b>UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER</b>			



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: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$		
26	$Q(x) = \sin ax$ or $\cos ax$		
27	$Q(x) = x^n$		
28	$Q(x) = e^{ax}V(x)$		
29	$Q(x) = xV(x)$		
30	$Q(x) = x^n \sin ax$ or $\cos ax$		
31	Method of variation of parameters		
32	Applications: LCR Circuit		
33	Simple Harmonic Motion		
UNIT-IV PARTIAL DIFFERENTIATION			
CO4: Familiarize with functions of several variables which is useful in optimization			
TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications			
34	Homogeneous function; Euler's Theorem	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
35	Total Derivative; Chain rule		
36	Taylor's mean value theorems		
37	Maclaurin's series		
38	Jacobians, formulae		
39	Functional dependence		
40	Maxima minima of two variables		
41	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			
42	Introduction	From: 29-03-2021. To: 12-04-2021	Lecture interspersed with discussions
43	Double integrals		
44	Triple integrals		
45	Change of order of integration		
46	Change of variable		
47	Applications: Finding areas		
48	Finding volumes		

  
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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : CSM</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: Dr.A.Padmaja</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	
<b>UNIT-III: Stephen Hawking-Positivity “Benchmark”, Shakespeare’s Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



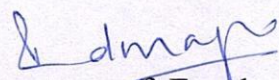
	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	

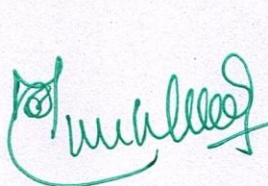

**UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou**

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

**TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications**

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

  
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**DEPARTMENT OF SCIENCE AND HUMANITIES**

**TENTATIVE LESSON PLAN (R201110)**

<b>Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C</b>		
<b>Section : Sec CSM</b>	<b>Date : 8/1/2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By : Dr.B.Asha Latha</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs, Moodle**

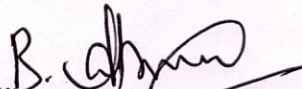
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Computer Systems	8-1-21  To  23-1-21	Lecture Interspersed With  discussions
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		
5	Computer Numbering System		
6	Storing Integers		
7	Storing Real Numbers		
8	C Programs, Identifiers		
9	Types, Variable		
10	Constants, Input/output		
11	Programming Examples		
12	Scope, Storage Classes and Type Qualifiers		
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	<b>Tutorial</b>		
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	25-1-21	
20	Logical Bitwise Operators	To	
21	Shift Operators		



24	Multiway Selection		interspersed with discussions
25	More Standard Functions		
26	Concept of Loop		
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		
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>UNIT-III Arrays, String, Enum, Structure, Unions</b> <b>CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
36	Concepts, Using Array in C	15-2-21 To 30-2-21	Lecture interspersed with discussions
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		
43	Arrays of Strings		
44	String Manipulation Functions		
45	String/ Data Conversion		
46	A Programming Example – Morse Code		
47	The Type Definition (Type def)		
48	Enumerated Types		
49	Structure		
50	Unions		
51	Programming Application		
52	Tutorial		
<b>UNIT-IV Pointers</b> <b>CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction		
54	Pointers to pointers		
55	Compatibility, L value and R value		
56	Arrays, and Pointers		



57	Pointer Arithmetic and Arrays	1-3-21 To 15-3-21	Lecture interspersed with discussions
58	Memory Allocation Function		
59	Array of Pointers		
60	Programming Application		
61	Processor Commands		
62	Tutorial		
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Files, Streams	16-3-21 To 5-4-21	Lecture interspersed with discussions
64	Standard Library Input / Output Functions		
65	Formatting Input / Output Functions		
66	Character Input / Output Functions		
67	Text versus Binary Streams		
68	Functions for Files		
69	Converting File Type		
70	Designing, Structured Programs		
71	Function in C		
72	User Defined Functions		
73	Inter-Function Communication		
74	Standard Functions		
75	Passing Array to Functions		
76	Passing Pointers to Functions		
77	Recursion		
78	Passing an Array to Function		
79	<b>Tutorial</b>		

  
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## TENTATIVE LESSON PLAN: R201115

<b>Course Title: APPLIED CHEMISTRY</b>			
<b>Section :CSM</b>	<b>Date : 8-1-2021</b>	<b>Page No : 1-3</b>	
<b>Revision No :00</b>	<b>Prepared By : B.SOWJANYA</b>	<b>Approved By : HOD</b>	
<b>Tools:</b>			
<b>No. of Periods:71</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>Unit – I: POLYMER TECHNOLOGY</b>			
(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.)			
<b>CO1:</b> Importance of usage of plastics in household appliances and composites(FRP) in aerospace and automotive industries.			
1	Polymerisation:- Introduction-methods of polymerization	8-1-2021	Lecture interspersed with discussions
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 examples of plastic.	20-1-2021	
6	Materials used in electronic gadgets, recycling of e-plastic waste	21-1-2021	
7	Elastomers:- Natural rubber-drawbacks-vulcanization	23-1-2021	
8	preparation, properties and applications of synthetic rubbers	27-1-2021	
9	(Buna S, thiokol and polyurethanes	28-1-2021	
10	Composite materials: Fiber reinforced plastics-	30-1-2021	
11	conducting polymers-	2-2-2021	
13	Biodegradable polymersbiopolymers	3-2-2021	
<b>Unit -II :ELECTROCHEMICAL CELLS AND CORROSION</b>			
(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.)			
<b>CO2:</b> Outline the basics for the construction of electrochemical cells, batteries and fuel cells. Understand the mechanism of corrosion and how it can be prevented.			
<b>1</b>	<b>Unit -II :ELECTROCHEMICAL CELLS</b>	6-2-2021	Lecture interspersed with discussions
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	
6	construction of glass electrode	10-2-2021	
7	Batteries: Dry cell, Ni-Cd cells,	11-2-2021	
8	N-iMetal hydride cells, Li ion battery, zinc air cells	13-2-2021	
9	Fuel cells: H <sub>2</sub> -O <sub>2</sub> , CH <sub>3</sub> OH-O <sub>2</sub> ,	15-2-2021	



10	phosphoric acid, molten carbonate	18-2-2021	
11	<b>Corrosion:-</b> 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	
<b>Unit – III: UNIT III: MATERIAL CHEMISTRY</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.) <b>CO3:</b> Explain the preparation of semiconductors and nanomaterials, engineering applications of nanomaterials, superconductors and liquidcrystals.			
1	<b>Part I : Non-elemental semiconducting materials</b>	26-2-2021	Lecture interspersed with discussions
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	<b>Part II: Nano materials:-</b> Introduction-sol-gel method-	23-3-2021	
6	characterization by BET, SEM and TEM methods	23-2021	
7	Applications of graphene-carbon nanotubes and fullerenes:	24-3-2021	
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	
<b>UNIT IV: SPECTROSCOPIC TECHNIQUES &amp; NON CONVENTIONAL ENERGY SOURCES</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.) <b>CO4:</b> 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.	<b>Part A: SPECTROSCOPIC TECHNIQUES</b> Electromagnetic spectrum-UV	27-3-2021	Lecture
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	



5.	FT-IR (instrumentation and IR of some organic compounds, applications).	1-4-2021	interspersed with discussions
6.	Magnetic resonance imaging and CT scan (procedure & applications).	1-4-2021	
7.	<b>Part B: NON CONVENTIONAL ENERGY SOURCES</b>	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	
<b>UNIT V: ADVANCED CONCEPTS/TOPICS IN CHEMISTRY</b> <b>Applied Chemistry”</b> by, Dr. Bharathi kumara Yallamanchili, VGS. <b>C05: Outline the basics of computational chemistry and molecular switches.</b>			
1	Computational chemistry: Introduction, Ab Initio studies Molecular switches	1-4-2021	Lecture interspersed with discussions
2.	characteristics of molecular motors and machines, Rotaxanes	1-4-2021	
3.	Catenanes as artificial molecular machines, prototypes	3-4-2021	
4.	linear motions in rotaxanes, an acid-base controlled molecular shuttle	3-4-2021	
5.	a molecular elevator,	5-4-2021	
6.	an autonomous light-powered molecular motor	5-4-2021	
7.	Computational chemistry: Introduction, Ab Initio studies Molecular switches	5-4-2021	
8.	characteristics of molecular motors and machines,	6-4-2021	

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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : CS D</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : S.KALPANA</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1: utilize mean value theorems to real life problems**

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

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

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

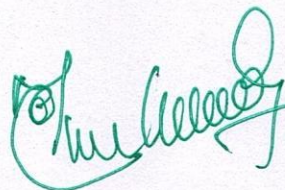
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

**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: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$		
26	$Q(x) = \sin ax$ or $\cos ax$		
27	$Q(x) = x^n$		
28	$Q(x) = e^{ax}V(x)$		
29	$Q(x) = xV(x)$		
30	$Q(x) = x^n \sin ax$ or $\cos ax$		
31	Method of variation of parameters		
32	Applications: LCR Circuit		
33	Simple Harmonic Motion		
UNIT-IV PARTIAL DIFFERENTIATION			
CO4: Familiarize with functions of several variables which is useful in optimization			
TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications			
34	Homogeneous function; Euler's Theorem	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
35	Total Derivative; Chain rule		
36	Taylor's mean value theorems		
37	Maclaurin's series		
38	Jacobians, formulae		
39	Functional dependence		
40	Maxima minima of two variables		
41	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			
42	Introduction	From: 29-03-2021. To: 12-04-2021	Lecture interspersed with discussions
43	Double integrals		
44	Triple integrals		
45	Change of order of integration		
46	Change of variable		
47	Applications: Finding areas		
48	Finding volumes		

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>			
<b>Section : CSD</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>	
<b>Revision No : 00</b>	<b>Prepared By: Dr.A.Padmaja</b>	<b>Approved By : HOD</b>	
<b>Tools: Black board</b>			
No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	
<b>UNIT-III: Stephen Hawking-Positivity “Benchmark”, Shakespeare’s Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	
<b>UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou</b> <b>CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
41	<b>Stay Hungry-Stay foolish</b>	30-03-21	Lecture interspersed with discussions
42	<b>Listening</b> Identifying key terms	01-04-21	
43	<b>Speaking:</b> Formal oral presentations	05-04-21	
44	<b>Reading:</b> Reading for comprehension	08-04-21	
45	<b>Reading for Writing:</b> Writing academic proposals	09-04-21	
46	<b>Vocabulary:</b> Technical vocabulary	10-04-21	
47	<b>Grammar:</b> Editing short texts	12-04-21	

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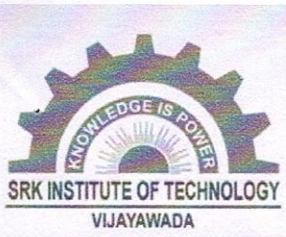
## TENTATIVE LESSON PLAN R201110

<b>Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C (ES1201)</b>		
<b>Section : Sec CSD</b>	<b>Date : 8/1/2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By : Dr.N Neelima Priyanka</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Computer Systems	8-1-21 To 23-1-21	Lecture Interspersed With discussions
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		
5	Computer Numbering System		
6	Storing Integers		
7	Storing Real Numbers		
8	C Programs, Identifiers		
9	Types, Variable		
10	Constants, Input/output		
11	Programming Examples		
12	Scope, Storage Classes and Type Qualifiers		
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	<b>Tutorial</b>		
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	25-1-21	
20	Logical Bitwise Operators	To	
21	Shift Operators		





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22	Logical Data and Operators	15-2-21	Lecture interspersed with discussions
23	Two Way Selection		
24	Multiway Selection		
25	More Standard Functions		
26	Concept of Loop		
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		
<b>No. of Periods</b>	<b>TOPIC</b>		
<b>UNIT-III Arrays, String, Enum, Structure, Unions</b>			
<b>CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
36	Concepts, Using Array in C	15-2-21 To 30-2-21	Lecture interspersed with discussions
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		
43	Arrays of Strings		
44	String Manipulation Functions		
45	String/ Data Conversion		
46	A Programming Example – Morse Code		
47	The Type Definition (Type def)		
48	Enumerated Types		
49	Structure		
50	Unions		
51	Programming Application		
52	Tutorial		
<b>UNIT-IV Pointers</b>			
<b>CO4: To assimilate about pointers, dynamic memory allocation and know the significance of</b>			




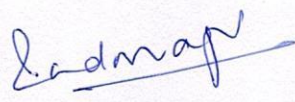


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<b>Preprocessor.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	1-3-21 To 15-3-21	Lecture interspersed with discussions
54	Pointers to pointers		
55	Compatibility, L value and R value		
56	Arrays, and Pointers		
57	Pointer Arithmetic and Arrays		
58	Memory Allocation Function		
59	Array of Pointers		
60	Programming Application		
61	Processor Commands		
62	Tutorial		
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Files, Streams	16-3-21 To 5-4-21	Lecture interspersed with discussions
64	Standard Library Input / Output Functions		
65	Formatting Input / Output Functions		
66	Character Input / Output Functions		
67	Text versus Binary Streams		
68	Functions for Files		
69	Converting File Type		
70	Designing, Structured Programs		
71	Function in C		
72	User Defined Functions		
73	Inter-Function Communication		
74	Standard Functions		
75	Passing Array to Functions		
76	Passing Pointers to Functions		
77	Recursion		
78	Passing an Array to Function		
79	<b>Tutorial</b>		

  
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## TENTATIVE LESSON PLAN: R201115

<b>Course Title: APPLIED CHEMISTRY</b>			
<b>Section : CSD</b>	<b>Date :8-01-2021</b>	<b>Page No :1-3</b>	
<b>Revision No :00</b>	<b>Prepared By: G.L.SARVANI</b>	<b>Approved By : HOD</b>	
<b>Tools: Black board, PPTS</b>			
<b>No. of Periods:75</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>Unit – I: POLYMER TECHNOLOGY</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.) <b>CO1:</b> 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	Lecture interspersed with discussions
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	
7	Elastomers:- Natural rubber-drawbacks-vulcanization	25-1-2021	
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	conducting polymers-	29-1-2021	
12	Biodegradable polymers biopolymers	30-1-2021	
13	Biomedical polymers	30-1-2021	
<b>Unit -II :ELECTROCHEMICAL CELLS AND CORROSION</b> (Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.) <b>CO2:</b> Outline the basics for the construction of electrochemical cells, batteries and fuel cells. Understand the mechanism of corrosion and how it can be prevented			
1	<b>Unit -II :ELECTROCHEMICAL CELLS</b>	02-2-2021	Lecture interspersed with discussions
2	Single electrode potentia.	02-2-2021	
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	
6	construction of glass electrode	03-2-2021	
7	Batteries: Dry cell, Ni-Cd cells,	04-2-2021	
8	NiMetal hydride cells, Li ion battery, zinc air cells	04-2-2021	
9	Fuel cells: H <sub>2</sub> -O <sub>2</sub> , CH <sub>3</sub> OH-O <sub>2</sub> ,	05-2-2021	



10	phosphoric acid, molten carbonate	10-2-2021	
11	<b>Corrosion:</b> -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	
<b>UNIT III: MATERIAL CHEMISTRY</b>			
(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	<b>Part I : Non-elemental semiconducting materials</b>	02-3-2021	Lecture interspersed with discussions
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	
5	<b>Part II: Nano materials:-</b> Introduction-sol-gel method-	20-3-2021	
6	characterization by BET, SEM and TEM methods	24-3-2021	
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	
<b>UNIT IV: SPECTROSCOPIC TECHNIQUES &amp; NON CONVENTIONAL ENERGY SOURCES</b>			
(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	<b>Part A: SPECTROSCOPIC TECHNIQUES</b> Electromagnetic spectrum-UV	09-4-2021	
2.	laws of absorption, instrumentation,	09-4-2021	
3.	Theory of electronic spectroscopy, Frank-condon	09-4-2021	



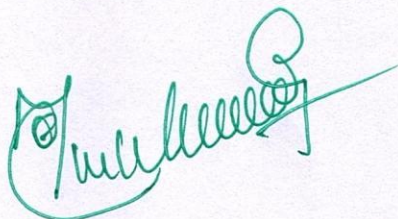
	principle		
4.	chromophores and auxochromes, intensity shifts, applications	09-4-2021	Lecture interspersed with discussions
5.	FT-IR (instrumentation and IR of some organic compounds, applications).	10-4-2021	
6.	Magnetic resonance imaging and CT scan (procedure & applications).	10-4-2021	
7.	<b>Part B: NON CONVENTIONAL ENERGY SOURCES</b>	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	

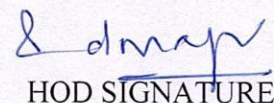
**UNIT V: ADVANCED CONCEPTS/TOPICS IN CHEMISTRY**  
(Engineering Chemistry by Jain and Jain; Dhanpat Rai Publishing Co.)

**C05:** Outline the basics of computational chemistry and molecular switches.

1.	Computational chemistry: Introduction, Ab Initio studies Molecular switches	10-4-2021	Lecture interspersed with discussions
2.	characteristics of molecular motors and machines, Rotaxanes	10-4-2021	
3	Catenanes as artificial molecular machines, prototypes	11-4-2021	
4.	linear motions in rotaxanes, an acid-base controlled molecular shuttle	11-4-2021	
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	

  
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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : CSE-A</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : S.SUMAN</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1: utilize mean value theorems to real life problems**

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

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

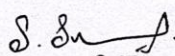
**TB: "Engineering Mathematics", Dr. T.K.V.Iyengar; S.Chand publications**

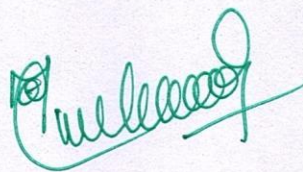
12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

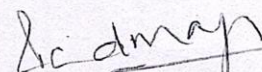
**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



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

  
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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : CSE-B</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : B.V.RAMAKRISHNA RAO</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1: utilize mean value theorems to real life problems**

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

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

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

12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton 's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



**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**

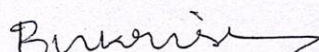
24	Linear DE of constant coefficients	From: 08-02-2021 To: 13-02-2021 & From: 22-02-2021 To: 06-03-2021	Lecture interspersed with discussions
25	Solutions of $f(D) = Q(x), Q(x) = e^{ax}$		
26	$Q(x) = \sin ax$ or $\cos ax$		
27	$Q(x) = x^n$		
28	$Q(x) = e^{ax}V(x)$		
29	$Q(x) = xV(x)$		
30	$Q(x) = x^n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

**UNIT-IV PARTIAL DIFFERENTIATION****CO4: Familiarize 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	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
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: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

  
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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : CSE-A</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: Dr.G.Maithreyi</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	
<b>UNIT-III: Stephen Hawking-Positivity "Benchmark", Shakespeare's Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyl, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity 'Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare's Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyl, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



	English.		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	
<b>UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou</b> <b>CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
41	<b>Stay Hungry-Stay foolish</b>	30-03-21	Lecture interspersed with discussions
42	<b>Listening</b> Identifying key terms	01-04-21	
43	<b>Speaking:</b> Formal oral presentations	05-04-21	
44	<b>Reading:</b> Reading for comprehension	08-04-21	
45	<b>Reading for Writing:</b> Writing academic proposals	09-04-21	
46	<b>Vocabulary:</b> Technical vocabulary	10-04-21	
47	<b>Grammar:</b> Editing short texts	12-04-21	

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : CSE-B</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: Dr.G.Maithreyi</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	
<b>UNIT-III: Stephen Hawking-Positivity “Benchmark”, Shakespeare’s Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	



	English		discussions
36	<b>Reading:</b> Studying the use of graphic elements	08-03-21	
37	<b>Reading for Writing:</b> Information transfer	10-03-21	
38	<b>Vocabulary:</b> Technical vocabulary	22-03-21	
39	<b>Grammar:</b> Quantifying expressions	24-03-21	
40	Telephone Conversation: Wole Soyinka	26-03-21	
<b>UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou</b>			
<b>CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing</b>			
<b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
41	<b>Stay Hungry-Stay foolish</b>	30-03-21	
42	<b>Listening</b> Identifying key terms	01-04-21	Lecture interspersed with discussions
43	<b>Speaking:</b> Formal oral presentations	05-04-21	
44	<b>Reading:</b> Reading for comprehension	08-04-21	
45	<b>Reading for Writing:</b> Writing academic proposals	09-04-21	
46	<b>Vocabulary:</b> Technical vocabulary	10-04-21	
47	<b>Grammar:</b> Editing short texts	12-04-21	

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## TENTATIVE LESSON PLAN: R201110

### PROGRAMMING FOR PROBLEM SOLVING USING C

<b>Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C (R201110)</b>		
<b>Section : CSE-A</b>	<b>Date : 05/01/2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By : M.V.SUMANTH</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b> <b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Computer Systems	From: 06/01/21  To: 27/01/21	Lecture Interspersed With discussions
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		
5	Computer Numbering System		
6	Storing Integers		
7	Storing Real Numbers		
8	C Programs, Identifiers		
9	Types, Variable		
10	Constants, Input/output		
11	Programming Examples		
12	Scope, Storage Classes and Type Qualifiers		
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	Tutorial		
<b>UNIT-II Operators, Selection and Repetition</b> <b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types		Lecture interspersed with
20	Logical Bitwise Operators		
21	Shift Operators		
22	Logical Data and Operators		
23	Two Way Selection		
24	Multiway Selection		
25	More Standard Functions		



26	Concept of Loop	From: 28/01/21  To: 11/02/21	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		
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>

**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**

36	Concepts, Using Array in C	From: 11/02/21  To: 04/03/21	Lecture interspersed with discussions
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		
43	Arrays of Strings		
44	String Manipulation Functions		
45	String/ Data Conversion		
46	A Programming Example – Morse Code		
47	The Type Definition (Type def)		
48	Enumerated Types		
49	Structure		
50	Unions		
51	Programming Application		
52	Tutorial		

**UNIT-IV Pointers**

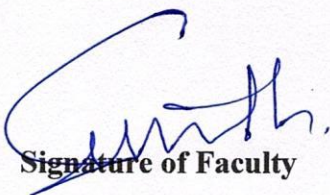
**CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.**


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

<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	From: 05/03/21	Lecture interspersed
54	Pointers to pointers		
55	Compatibility, L value and R value		
56	Arrays, and Pointers		



57	Pointer Arithmetic and Arrays	To: 26/03/21	with discussions
58	Memory Allocation Function		
59	Array of Pointers		
60	Programming Application		
61	Processor Commands		
62	Tutorial		
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
63	Function in C	From: 27/03/21  To: 10/04/21	Lecture interspersed with discussions
64	User Defined Functions		
65	Inter-Function Communication		
66	Standard Functions		
67	Passing Array to Functions		
68	Passing Pointers to Functions		
69	Recursion		
70	Passing an Array to Function		
71	Files, Streams		
72	Standard Library Input / Output Functions		
73	Formatting Input / Output Functions		
74	Character Input / Output Functions		
75	Text versus Binary Streams		
76	Functions for Files		
77	Converting File Type		
78	Designing, Structured Programs		
79	Tutorial		

  
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**TENTATIVE LESSON PLAN: R201110**  
**PROGRAMMING FOR PROBLEM SOLVING USING C**

<b>Course Title: PROGRAMMING FOR PROBLEM SOLVING USING C (R201110)</b>		
<b>Section : Sec B</b>	<b>Date : 05/01/2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By : Dr. B.Srikanth</b>	<b>Approved By : HOD</b>

**Tools: Black board, PPTs, Moodle**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-I Introduction to C language</b>			
<b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Computer Systems	<b>From:</b> 06/01/21  <b>To:</b> 30/01/21	Lecture Interspersed With discussions
2	Computing Environments		
3	Computer languages		
4	Creating and running Programs		
5	Computer Numbering System		
6	Storing Integers		
7	Storing Real Numbers		
8	C Programs, Identifiers		
9	Types, Variable		
10	Constants, Input/output		
11	Programming Examples		
12	Scope, Storage Classes and Type Qualifiers		
13	Expressions Precedence and Associativity		
14	Side Effects, Evaluating Expressions		
15	Type Conversion Statements		
16	Simple Programs		
17	Command Line Arguments		
18	Tutorial		
<b>UNIT-II Operators, Selection and Repetition</b>			
<b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types		Lecture interspersed with
20	Logical Bitwise Operators		
21	Shift Operators		
22	Logical Data and Operators		
23	Two Way Selection		
24	Multiway Selection		
25	More Standard Functions		




26	Concept of Loop	<b>From:</b> <b>1/2/21</b>  <b>To:</b> <b>10/02/21</b>	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		
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>UNIT-III Arrays, String, Enum, Structure, Unions</b> <b>CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
36	Concepts, Using Array in C	<b>From:</b> <b>11/02/21</b>  <b>To:</b> <b>05/03/21</b>	Lecture interspersed with discussions
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		
43	Arrays of Strings		
44	String Manipulation Functions		
45	String/ Data Conversion		
46	A Programming Example – Morse Code		
47	The Type Definition (Type def)		
48	Enumerated Types		
49	Structure		
50	Unions		
51	Programming Application		
52	Tutorial		
<b>UNIT-IV Pointers</b> <b>CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
53	Introduction	<b>From:</b>	Lecture interspersed
54	Pointers to pointers		
55	Compatibility, L value and R value		
56	Arrays, and Pointers		



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

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## TENTATIVE LESSON PLAN: R201117

Course Title: Applied Physics			
Section :CSE-A	Date : 08.01.2021	Page No : 00	
Revision No :00	Prepared By : Dr. J. Ashok	Approved By : HOD	
Tools:			
No. of Periods	TOPIC	DATE	Mode of Delivery
<b>UNIT-I</b>	<b>Wave Optics</b> <b>CO1:</b> Analyze the differences between interference and diffraction with applications. And illustrate the resolving power of various optical instruments.	From: 08/01/2021 To: 30/01/2021	Lecture interspersed with discussions
1	<b>INTERFERENCE:</b> Introduction		
2	Principle of Superposition		
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	<b>Diffraction:</b> Introduction		Lecture interspersed with discussions
11	Fresnel and Fraunhofer Diffraction		
12	Fraunhofer diffraction at single slit		
13	Fraunhofer diffraction at single slit		
14	Fraunhofer diffraction at Double Slit		
15	Fraunhofer diffraction at N-Slits		
16	Grating Equation		
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	<b>Polarization :</b> Introduction		Lecture interspersed with discussions
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Double Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates and Problems		
<b>UNIT- II</b>	<b>Lasers and Fiber Optics</b> <b>CO2:</b> Explain various types of emission of radiation. Identify the role of laser in engineering applications. Identify the applications of optical fibers in medical, communication and other fields. Apply the fiber optic concepts in various fields.	From: 01-02-2021 To: 13-02-2021	Lecture interspersed with discussions
26	<b>Lasers :</b> Introduction		
27	Characteristics of Laser		
28	Spontaneous and Stimulated emission		
29	Einstein's Coefficients		
30	Population Inversion, Lasing action		
31	Pumping Mechanism-Pumping method		



32	Ruby Laser		Lecture interspersed with discussions
33	Helium Neon Laser		
34	Applications of Lasers		
35	<b>Fiber Optics:</b> Introduction		
36	Principle of Optical Fiber		
37	Acceptance angle and Numerical Aperture		
38	Classifications optical fibers based on refractive index profile and modes		
39	Propagation of electromagnetic wave through optical fibers, applications		
40	Problems		
<b>UNIT -III</b>	<b>Quantum Mechanics, Free Electron Theory and Band theory</b> <b>CO3:</b> Describe the dual nature of matter. Identify the role of Schrodinger's time independent wave equation in studying particle in one-dimensional infinite potential well. Identify the role of classical and quantum free electron theory in the study of electrical conductivity.	From: 22-02-2021 To 10-03-2021	
41	<b>Quantum Mechanics:</b> 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		
47	Problems		
48	<b>Free Electron Theory:</b> Introduction		
49	Classical free electron theory- merits and demerits		
50	Quantum free electron theory- merits and demerits		
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	<b>Band theory of Solids :</b> 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		
<b>UNIT-IV</b>	<b>Dielectric and Magnetic Materials</b> <b>CO4:</b> Explain the concept of dielectric constant and polarization in dielectric materials. Explain the applications of dielectric and magnetic materials . Apply the concept of magnetism to magnetic devices.	From 12-03-2021 To 25-03-2021	Lecture interspersed with discussions
60	<b>Dielectric Materials:</b> Introduction, Dielectric polarization		
61	Types of polarizations- Electronic polarisation		
62	Ionic polarisation, Orientation polarizations		
63	Lorentz internal field		
64	Clausius-Mossotti equation, Piezoelectricity.		
65	<b>Magnetic Materials:</b> Introduction		
66	Magnetic dipole moment , Magnetization, Magnetic susceptibility and permeability		



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		
71	Eddy currents, Engineering applications and Problems		
<b>UNIT – V</b>	<b>Semiconductors and Superconductors</b> <b>CO5:</b> 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	<b>Semiconductors:</b> Introduction, Intrinsic semiconductors		Lecture interspersed with discussions
73	Density of charge carriers ,Electrical conductivity, Fermi level		
74	Extrinsic semiconductors , density of charge carriers, Dependence of Fermi energy on carrier concentration and temperature		
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	<b>Superconductors:</b> 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		

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## TENTATIVE LESSON PLAN: R201117

<b>Course Title: Applied Physics</b>			
<b>Section :CSE-B</b>		<b>Date : 08.01.2021</b>	<b>Page No : 00</b>
<b>Revision No :00</b>		<b>Prepared By : Dr. J. Ashok</b>	<b>Approved By : HOD</b>
<b>Tools:</b>			
No. of Periods	TOPIC	DATE	Mode of Delivery
<b>UNIT-I</b>	<b>Wave Optics</b> <b>CO1:</b> Analyze the differences between interference and diffraction with applications. And illustrate the resolving power of various optical instruments.	From: 08/01/2021 To: 30/01/2021	Lecture interspersed with discussions
1	<b>INTERFERENCE:</b> Introduction		
2	Principle of Superposition		
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	<b>Diffraction:</b> Introduction		
11	Fresnel and Fraunhofer Diffraction		
12	Fraunhofer diffraction at single slit		
13	Fraunhofer diffraction at single slit		
14	Fraunhofer diffraction at Double Slit		
15	Fraunhofer diffraction at N-Slits		
16	Grating Equation		
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	<b>Polarization :</b> Introduction		
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Double Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates and Problems		
<b>UNIT- II</b>	<b>Lasers and Fiber Optics</b> <b>CO2:</b> Explain various types of emission of radiation. Identify the role of laser in engineering applications. Identify the applications of optical fibers in medical, communication and other fields. Apply the fiber optic concepts in various fields.	From: 01-02-2021 To: 13-02-2021	Lecture interspersed with discussions
26	<b>Lasers :</b> Introduction		
27	Characteristics of Laser		
28	Spontaneous and Stimulated emission		
29	Einstein's Coefficients		
30	Population Inversion, Lasing action		
31	Pumping Mechanism-Pumping method		



32	Ruby Laser		
33	Helium Neon Laser		
34	Applications of Lasers		
35	<b>Fiber Optics:</b> Introduction		
36	Principle of Optical Fiber		
37	Acceptance angle and Numerical Aperture		
38	Classifications optical fibers based on refractive index profile and modes		
39	Propagation of electromagnetic wave through optical fibers, applications		
40	Problems		
<b>UNIT -III</b>	<b>Quantum Mechanics, Free Electron Theory and Band theory</b> <b>CO3:</b> Describe the dual nature of matter. Identify the role of Schrodinger's time independent wave equation in studying particle in one-dimensional infinite potential well. Identify the role of classical and quantum free electron theory in the study of electrical conductivity.	From: 22-02-2021 To 10-03-2021	Lecture interspersed with discussions
41	<b>Quantum Mechanics:</b> 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		
47	Problems		
48	<b>Free Electron Theory:</b> Introduction		
49	Classical free electron theory- merits and demerits		
50	Quantum free electron theory- merits and demerits		
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	<b>Band theory of Solids :</b> 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		
<b>UNIT-IV</b>	<b>Dielectric and Magnetic Materials</b> <b>CO4:</b> Explain the concept of dielectric constant and polarization in dielectric materials. Explain the applications of dielectric and magnetic materials . Apply the concept of magnetism to magnetic devices.	From 12-03-2021 To 25-03-2021	Lecture interspersed with discussions
60	<b>Dielectric Materials:</b> Introduction, Dielectric polarization		
61	Types of polarizations- Electronic polarisation		
62	Ionic polarisation, Orientation polarizations		
63	Lorentz internal field		
64	Clausius-Mossotti equation, Piezoelectricity.		
65	<b>Magnetic Materials:</b> Introduction		
66	Magnetic dipole moment , Magnetization, Magnetic susceptibility and permeability		



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		
71	Eddy currents, Engineering applications and Problems		
<b>UNIT – V</b>	<b>Semiconductors and Superconductors</b> <b>CO5:</b> 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	Lecture interspersed with discussions
72	<b>Semiconductors:</b> Introduction, Intrinsic semiconductors		
73	Density of charge carriers ,Electrical conductivity, Fermi level		
74	Extrinsic semiconductors , density of charge carriers, Dependence of Fermi energy on carrier concentration and temperature		
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	<b>Superconductors:</b> 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		

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## TENTATIVE LESSON PLAN: R201101

<b>Course Title: MATHEMATICS – 1</b>		
<b>Section : IT</b>	<b>Date : 04-01-2021</b>	<b>Page No : 01 of 02</b>
<b>Revision No : 00</b>	<b>Prepared By : B.V.RAMAKRISHNA RAO</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
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**UNIT-1: SEQUENCES, SERIES AND MEAN VALUE THEOREMS**

**CO1:utilize mean value theorems to real life problems**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

1	SEQUENCES AND SERIES: Convergence and Divergence	From: 06-01-2021  To: 23-01-2021	Lecture interspersed with discussions
2	Ratio test		
3	Comparison test		
4	Integral test		
5	Cauchy 's root test		
6	Alternating series		
7	Leibnitz 's rule		
8	Mean Value Theorems: Rolle 's Theorem		
9	Lagrange 's mean value theorem		
10	Cauchy 's mean value theorem		
11	Taylor 's and Maclaurin 's theorems with remainders		

**UNIT-II DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE**

**CO2: Solve the differential equations related to various engineering fields**

**TB:“ Engineering Mathematics”, Dr. T.K.V.Iyengar; S.Chand publications**

12	Introduction: Differential Equations of First order first degree	From: 25-01-2021  To: 06-02-2021	Lecture interspersed with discussions
13	Exact Equations – Conditions of Exactness		
14	Equations reducible to Exact		
15	Non Exact Differential Equations		
16	Linear Differential Equations of first order		
17	Bernouli Equation		
18	Equations reducible to linear		
19	Orthogonal Trajectories - Cartesian		
20	Orthogonal Trajectories - Polar		
21	Newton's law of cooling		
22	Natural growth or decay		
23	Electrical Circuits		

**UNIT-III : LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER**



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

**UNIT-IV PARTIAL DIFFERENTIATION**

**CO4: Familiarize 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	From: 08-03-2021 To: 27-03-2021	Lecture interspersed with discussions
34	Total Derivative; Chain rule		
35	Taylor's mean value theorems		
36	Maclaurin's series		
37	Jacobians, formulae		
38	Functional dependence		
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: 29-03-2021 To: 17-03-2021	Lecture interspersed with discussions
42	Double integrals		
43	Triple integrals		
44	Change of order of integration		
45	Change of variable		
46	Applications: Finding areas		
47	Finding volumes		

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## TENTATIVE LESSON PLAN: R201102

<b>Course Title: COMMUNICATIVE ENGLISH</b>		
<b>Section : IT</b>	<b>Date : 08-01-2021</b>	<b>Page No : 01 of 03</b>
<b>Revision No : 00</b>	<b>Prepared By: N. Gayathri</b>	<b>Approved By : HOD</b>

**Tools: Black board**

No. of Periods	TOPIC	Date	Mode of Delivery
<b>UNIT-1: A Drawer full of happiness, Deliverance by Premchand</b> <b>CO1: Facilitate effective listening skills for better comprehension of academic lectures and English spoken by native speakers</b> <b>TB: —Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
1	A Drawer full of happiness	08-01-21	Lecture interspersed with discussions
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	
5	Reading for Writing : Paragraph writing	19-01-21	
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	
<b>UNIT-II Nehru's letter to his daughter Indira on her birthday, Bosom Friend by Hira Bansode</b> <b>CO2: Focus on appropriate reading strategies for comprehension of various academic texts and authentic materials</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Societyll, Pearson Publications</b>			
12	Nehru's letter to his daughter Indira on her birthday		Lecture interspersed
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	



16	<b>Reading for Writing:</b> Summarizing	03-02-21	with discussions
17	<b>Vocabulary:</b> Technical vocabulary	04-02-21	
18	<b>Grammar:</b> 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	
<b>UNIT-III: Stephen Hawking-Positivity “Benchmark”, Shakespeare’s Sister by Virginia Woolf</b> <b>CO3: Help improve speaking skills through participation in activities such as role plays, discussions and structured talks/oral presentations</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
24	<b>Stephen Hawking-Positivity ‘Benchmark</b>	11-02-21	Lecture interspersed with discussions
25	<b>Listening:</b> Listening for global comprehension	15-02-21	
26	<b>Speaking:</b> Discussing specific topics in pairs	16-02-21	
27	<b>Reading:</b> Reading a text in detail	17-02-21	
28	<b>Reading for Writing:</b> Summarizing	19-02-21	
29	<b>Vocabulary:</b> Technical vocabulary	22-02-21	
30	<b>Grammar:</b> Verbs - tenses; subject-verb agreement	22-02-21	
31	<b>Shakespeare’s Sister by Virginia Woolf</b>	24-02-21	
32	Long Answers	26-02-21	
<b>UNIT IV Liking a Tree, Unbowed: Wangari Maathai, Telephone Conversation-Wole Soyinka</b> <b>CO4: Impart effective strategies for good writing and demonstrate the same in summarizing, writing well organized essays, record and report useful information.</b> <b>TB: Infotech English, Maruthi Publications, —The Individual Society, Pearson Publications</b>			
33	<b>Like a Tree, Unbowed: Wangari Maathai-biography</b>		Lecture interspersed with
34	<b>Listening:</b> Making predictions while listening	03-03-21	
35	<b>Speaking:</b> Role plays for practice of conversational	04-03-21	




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

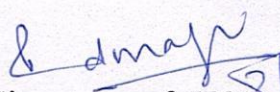
**UNIT-V: Stay Hungry-Stay foolish, Still I Rise by Maya Angelou**

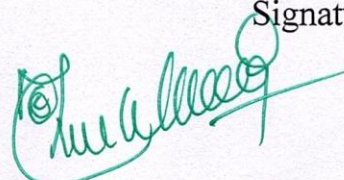
**CO5: Provide knowledge of grammatical structures and vocabulary and encourage their appropriate use in speech and writing**

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

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

  
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**TENTATIVE LESSON PLAN: 1R201110**

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

**Tools: Black board, PPTs, Moodle**


<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>UNIT-I Introduction to C language</b> <b>CO1: To learn about the computer systems, computing environments, developing of a computer program and Structure of a C Program.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
1	Creating and running Programs	08/1/21	Lecture Interspersed With discussions
2	Computer Numbering System	09/1/21	
3	Storing Integers	11/1/21	
4	Storing Real Numbers	18/1/21	
5	C Programs, Identifiers	19/1/21	
6	Types, Variable	20/1/21	
7	Constants, Input/output	21/1/21	
8	Programming Examples	22/1/21	
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	
<b>UNIT-II Operators, Selection and Repetition</b> <b>CO2: To gain knowledge of the operators, selection, control statements and repetition in C.</b> <b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
19	Exact Size Integer Types	5/2/21	Lecture interspersed with discussions
20	Logical Bitwise Operators	6/2/21	
21	Shift Operators	8/2/21	
22	Logical Data and Operators	9/2/21	
23,24, 25	Two Way Selection	10-12/2/21	
26	Multiway Selection	13/2/21	
27	More Standard Functions	15/2/21	
28	Concept of Loop	16/2/21	




29	Pretest and Post-test Loops	17/2/21	
30	Initialization and Updating	18/2/21	
31	Event and Counter Controlled Loops	19/2/21	
32	Loops in C	20/2/21	
33	Other Statements Related to Looping	22/2/21	
34	Looping Applications	23-25/2/21	
35	Programming Example		
36	Tutorial	26/2/21	
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
<b>UNIT-III Arrays, String, Enum, Structure, Unions</b>			
<b>CO3: To learn about the design concepts of arrays, strings, enumerated structure and union types. To learn about their usage.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
37	Concepts, Using Array in C	27/2/21	Lecture interspersed with discussions
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	
49,50 51	A Programming Example	13-15/3/21	
52	The Type Definition (Type def)	16/3/21	
53	Enumerated Types	17/3/21	
54,55 56	Structure, Unions	18-20/3/21	
57	Programming Application	26/03/21	
58	Tutorial	26-31/3/21	
<b>UNIT-IV Pointers</b>			
<b>CO4: To assimilate about pointers, dynamic memory allocation and know the significance of Preprocessor.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
<b>No. of Periods</b>	<b>TOPIC</b>	<b>Date</b>	<b>Mode of Delivery</b>
59	Introduction	1/4/21	Lecture interspersed with
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	
64	Memory Allocation Function	7/4/21	
65	Array of Pointers	8/4/21	



66	Programming Application	9/4/21	discussions
67	Processor Commands	10/4/21	
68	Tutorial	10/4/21	
<b>UNIT-V Files and Functions</b>			
<b>CO5: To assimilate about File I/O and significance of functions.</b>			
<b>TB1: Programming for Problem Solving, Behrouz A. Forouzan, Richard F.Gilberg, CENGAGE</b>			
69	Designing, Structured Programs	12/4/21	Lecture interspersed with discussions
70	Function in C, User Defined Functions	13/4/21	
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, 19/4/21	
75	Formatting Input / Output Functions	20/4/21	
76	Character Input / Output Functions, Text versus Binary Streams	21/4/21, 22/4/21	
77	Functions for Files, Converting File Type	23/4/21	
78	Tutorial	24/4/21	

  
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## TENTATIVE LESSON PLAN: R201117

<b>Course Title: Applied Physics</b>			
<b>Section :IT</b>		<b>Date : 08.01.2021</b>	<b>Page No : 00</b>
<b>Revision No :00</b>		<b>Prepared By : M.VIDYA ELIZABETH</b>	<b>Approved By : HOD</b>
<b>Tools:</b>			
No. of Periods	TOPIC	DATE	Mode of Delivery
<b>UNIT-I</b>	<b>Wave Optics</b> <b>CO1:</b> Analyze the differences between interference and diffraction with applications. And illustrate the resolving power of various optical instruments.	From: 08/01/2021 To: 30/01/2021	Lecture interspersed with discussions
1	<b>INTERFERENCE:</b> Introduction		
2	Principle of Superposition		
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	<b>Diffraction:</b> Introduction		Lecture interspersed with discussions
11	Fresnel and Fraunhofer Diffraction		
12	Fraunhofer diffraction at single slit		
13	Fraunhofer diffraction at single slit		
14	Fraunhofer diffraction at Double Slit		
15	Fraunhofer diffraction at N-Slits		
16	Grating Equation		
17	Dispersive Power of Grating		
18	Resolving Power of Grating		
19	Problems		
20	<b>Polarization :</b> Introduction		
21	Types of Polarization		
22	Polarization by Reflection, Refraction		
23	Polarization by Double Refraction		
24	Nicol Prism		
25	Quarter Wave & Half Wave Plates and Problems		
<b>UNIT- II</b>	<b>Lasers and Fiber Optics</b> <b>CO2:</b> Explain various types of emission of radiation. Identify the role of laser in engineering applications. Identify the applications of optical fibers in medical, communication and other fields. Apply the fiber optic concepts in various fields.	From: 01-02-2021 To: 13-02-2021	Lecture interspersed with discussions
26	<b>Lasers :</b> Introduction		
27	Characteristics of Laser		
28	Spontaneous and Stimulated emission		
29	Einstein's Coefficients		
30	Population Inversion, Lasing action		
31	Pumping Mechanism-Pumping method		



32	Ruby Laser		
33	Helium Neon Laser		
34	Applications of Lasers		
35	<b>Fiber Optics:</b> Introduction		
36	Principle of Optical Fiber		
37	Acceptance angle and Numerical Aperture		
38	Classifications optical fibers based on refractive index profile and modes		Lecture interspersed with discussions
39	Propagation of electromagnetic wave through optical fibers, applications		
40	Problems		
<b>UNIT -III</b>	<b>Quantum Mechanics, Free Electron Theory and Band theory</b> <b>CO3:</b> Describe the dual nature of matter. Identify the role of Schrodinger's time independent wave equation in studying particle in one-dimensional infinite potential well. Identify the role of classical and quantum free electron theory in the study of electrical conductivity.	From: 22-02-2021 To 10-03-2021	
41	<b>Quantum Mechanics:</b> Introduction		Lecture interspersed with discussions
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		
47	Problems		
48	<b>Free Electron Theory:</b> Introduction		
49	Classical free electron theory- merits and demerits		
50	Quantum free electron theory- merits and demerits		
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	<b>Band theory of Solids :</b> 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		
<b>UNIT-IV</b>	<b>Dielectric and Magnetic Materials</b> <b>CO4:</b> Explain the concept of dielectric constant and polarization in dielectric materials. Explain the applications of dielectric and magnetic materials . Apply the concept of magnetism to magnetic devices.	From 12-03-2021 To 25-03-2021	Lecture interspersed with discussions
60	<b>Dielectric Materials:</b> Introduction, Dielectric polarization		
61	Types of polarizations- Electronic polarisation		
62	Ionic polarisation, Orientation polarizations		
63	Lorentz internal field		
64	Clausius-Mossotti equation, Piezoelectricity.		
65	<b>Magnetic Materials:</b> Introduction		
66	Magnetic dipole moment , Magnetization, Magnetic susceptibility and permeability		



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		
71	Eddy currents, Engineering applications and Problems		
<b>UNIT – V</b>	<b>Semiconductors and Superconductors</b> <b>CO5:</b> 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	Lecture interspersed with discussions
72	<b>Semiconductors:</b> Introduction, Intrinsic semiconductors		
73	Density of charge carriers ,Electrical conductivity, Fermi level		
74	Extrinsic semiconductors , density of charge carriers, Dependence of Fermi energy on carrier concentration and temperature		
75	Drift and diffusion currents – Einstein's equation		
76	Hall effect, Hall coefficient, Applications of Hall effect		
77	<b>Superconductors:</b> 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		

*H.V. Elizabeth*  
Signature of Faculty

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Signature of HOD

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