Discipline:-	Semester:-	Name Of The Teaching Faculty:- Aishwarya Dash
ETC	3rd	01.07.2024 To:- 08.11.2024
Subject:-	No Of Days	<u>U1.U7.2U24</u> 10 <u>UU.11.2U2.</u>
CIRCUIT	Per week	
THEORY	Class	
	Allotted:-4	
No. of week	Class Day	Topic to be taught
1 <sup>st</sup>	1 <sup>st</sup>	1.1 Circuit elements (Resistance, Inductance, Capacitance),
. 1	-	Coops of notwork analysis & synthesize
and the property of	2 <sup>nd</sup>	1.2 Voltage Division & Current Division, Energy Sources
1.11	3 <sup>rd</sup>	1 3 Flortric charge, electric current, Electrical energy,
		Electrical potential, R-L-C parameters, Active& Passive
	the state of the state of	Floments
	4 <sup>th</sup>	1.4 Energy Sources, Current and voltage sources and their
		transformation & mutual inductance
2 <sup>nd</sup>	151	1.5 Star – Delta transformation
	2 <sup>nd</sup>	Problems
	3 <sup>rd</sup>	2.1 Nodal & Mesh Analysis of Electrical Circuits with simple
	7.00 3 - W	problem.
	4 <sup>th</sup>	2.2 Thevenin's Theorem,
O.Ld	1 <sup>st</sup>	Norton's Theorem Statement, Explanation & applications
3 <sup>rd</sup>		Norton's Theorem Statement, Explanation & September 1
	2 <sup>nd</sup>	Maximum Power-transfer-Theorem
	3 <sup>rd</sup>	Problems
- 3 high.	4 <sup>th</sup>	2.2.1 Superposition Theorem,
4 <sup>th</sup>	1 <sup>st</sup>	do
	2 <sup>nd</sup>	Problems
	3 <sup>rd</sup>	Millman Theorem.
	4 <sup>th</sup>	Reciprocity Theorem-Statement, Explanation & applications
	and the same of th	
5 <sup>th</sup>	1	Problems
make a Richard	2 <sup>nd</sup>	Problems Out Time period Amplitude
_	3 <sup>rd</sup>	3.1 Definition of frequency, Cycle, Time period, Amplitude,
		Average value RMS value Instantaneous power & Form
		factor, Apparent power, Reactive power, power i riangle of AC
		Wave.
	4 <sup>th</sup>	3.2 Phasor representation of alternating quantities
6 <sup>th</sup>	1 <sup>st</sup>	3.3 Single phase Ac circuits-Behaviors of A.C. through pure
/		Resistor,
	2 <sup>nd</sup>	3.3 Single phase Ac circuits-Behaviors of A.C. through pure
		Inductor
4	3 <sup>rd</sup>	3.3 Single phase Ac circuits-Behaviors of A.C. through pure
	Acatx 7 Section	Capacitor.
	4 <sup>th</sup>	3.4 DC Transients-Behaviors of R-L, R-C, R-L-C series circuit
		& draw the phasor diagram and voltage triangle
		3.4 DC Transients-Behaviors of R-L, R-C, R-L-C series circuit & draw
		the phasor diagram and voltage triangle
4		the phasor diagram and voltage triangle
7 <sup>th</sup>	141	3.4 DC Transients-Behaviors of R-L, R-C, R-L-C series circuit

			P. draw the phases diagram and voltage triangle
	per service construction of	2 <sup>nd</sup>	& draw the phasor diagram and voltage triangle
		3 <sup>rd</sup>	3.5 Define Time Constant of the above Circuit
a district		4 <sup>th</sup>	Problems
, -	8 <sup>th</sup>		Problems
	8	1 <sup>st</sup>	4.1 Introduction to resonance circuits & Resonance tuned circuit,
		2 <sup>nd</sup>	4.2 Series& Parallel resonance
		3 <sup>rd</sup>	4.3 Expression for series resonance, Condition for Resonance,
		4 <sup>th</sup>	Frequency of Resonance, Impedance, Current, Voltage, power, Q Factor and Power Factor of Resonance, Bandwidth in term of Q.
	9 <sup>th</sup>	1 <sup>st</sup>	Frequency of Resonance, Impedance, Current, Voltage, power, Q Factor and Power Factor of Resonance, Bandwidth in term of Q.
		2 <sup>nd</sup>	4.4 Parallel Resonance (RL, RC& RLC) & derive the
			expression
		3 <sup>rd</sup>	4.4 Parallel Resonance (RL, RC& RLC) & derive the
			expression
		4 <sup>th</sup>	Condition for Resonance, Frequency of Resonance, Impedance,
			Current, Voltage, power, Q Factor and Power Factor of
* - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Resonance, Bandwidth in term of Q.
	10 <sup>th</sup>	1 <sup>st</sup>	45 0
		7	4.5 Comparisons of Series & Parallel resonance& applications
		2 <sup>nd</sup>	4.6 simple problems of above Circuit
		3 <sup>rd</sup>	the simple problems of above circuit
A company of the same of the s		4 <sup>th</sup>	5.1 Laplace Transformation Analysis and derive the
			The second second second second deliver inc
			equations for circuit parameters of Step response of R-L, R-C & R-L-C
	11 <sup>th</sup>	1 <sup>st</sup>	The state of the s
		47.4	5.1 Laplace Transformation, Analysis and derive the equations for circuit parameters of Step regrees of P. L. P. G. et P. J. G. et P. J. G. et P. J. G. et P. J. et P. G. et P. et P. G. et P. J. et P. G. et P. J. et P. G. et P. J. et P. G. et P. et P. et P. G. et P. et P. G. et P. et P. et P. G. et P. et P
		2 <sup>nd</sup>	for circuit parameters of Step response of R-L, R-C & R-L-C
The second secon			5.1 Laplace Transformation, Analysis and derive the equations for circuit parameters of Step response of R-L, R-C & R-L-C
		3 <sup>rd</sup>	5.1 Laplace Transformation, Analysis and derive the
			equations for circuit parameters of Step response of R-L, R-C
Dale FFFeb LE	CLEARING WAT	the second of th	& R-L-C
		4 <sup>th</sup>	The same of the sa
		The second second second	5.2 Analysis and derive the equations for circuit parameters
			of Impulse response of R-L, RC, R-L-C
	12 <sup>ui</sup>	13	5.2 Analysis and derive the equations for circuit parameters o
			impulse response of R-L. RC R-L-C
		2 <sup>nd</sup>	5.2 Analysis and derive the equations for
			parameters of inipulse response of R-I - DC - D I - C
		3 <sup>rd</sup>	5.2 Analysis and derive the equations for circuit parameters of
			Impulse response of R-L, RC, R-L-C
i dada	The A Company	4 <sup>th</sup>	6.1 Network elements, ports in Network (One port, two port),
	13 <sup>th</sup>	1 <sup>st</sup>	6.2 Network Configurations (T & pie)
	TOWN THE STATE	2 <sup>nd</sup>	6.3 Open circuit (7-Parameter)? Short Signature
7-1		F 12.	
7.4.6 42.		9, 12 4 7	Parameter) Parameters- Calculate open & short Circuit
	T- : : = :		Parameters for Simple Circuits & its conversion

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	3 <sup>rd</sup>	6.4 h- parameter (hybrid parameter) Representation
	4 <sup>th</sup>	6.5 Define T-Network & pie – Network
14 <sup>th</sup>	1 <sup>st</sup>	6.3 Open circuit (Z-Parameter) & Short Circuit (Y-Parameter)
		Parameters- Calculate open & short Circuit Parameters for
		Simple Circuits & its conversion
A Comment of the Comm	2 <sup>nd</sup>	7.1 Ideal &Practical filters and its applications, cut off
Book State of the		frequency, pass band and stop band.
	3 <sup>rd</sup>	7.2 Classify filters- low pass, high pass, band pass, band stop
	ALL PARTY	filters & study their Characteristics
	4 <sup>th</sup>	7.2 Classify filters- low pass, high pass, band pass, band stop
		filters & study their Characteristics.
15 <sup>th</sup>	1 <sup>st</sup>	7.3 Butterworth Filter Design
	2 <sup>nd</sup>	7.4 Attenuation and Gain, Bel, Decibel & neper and their
		relations.
	3 <sup>rd</sup>	7.5 Attenuators& its applications. Classification-T-Type & PI
		- Type attenuators
The second of th	4 <sup>th</sup>	7.1 Ideal &Practical filters and its applications, cut off
		frequency, pass band and stop band.

All other

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W2

Teaching Faculty

HOD, ETC