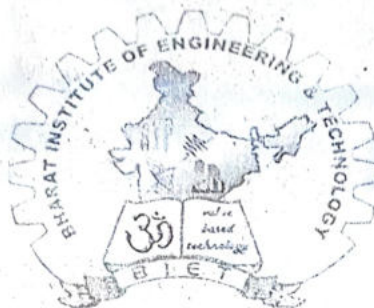


3rd Sem ETC

BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

SIVARAM VIHAR, GHATAKESWAR HILLS
MOHADA, BERHAMPUR (GM.)



STUDENT'S ATTENDANCE REGISTER

Time / Day	9:05 to 9:55	9:55 to 10:45	10:45 to 11:35	11:35 to 12:25	
MON		✓			
TUE				✓	
WED	✓				
FRI			✓		

Year/ Session	2nd Years, 2022-23
Semester & Branch	3 rd Semester & ETC
Subject with Code	TH-2. CIRCUIT AND NETWORK THEORY
Name of the Faculty Member	Binayaka Kumar Nayak

B.I.E.T. SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<u>UNIT 1</u>			
<u>CIRCUIT ELEMENTS & ENERGY SOURCES</u>			
1.1 → circuit elements (Resistance, Inductance, Capacitance) Scope of Network Analysis and Synthesis	16/9/22	<i>Bangor</i>	
1.2 → voltage Division and current division, Energy Source.	19/9/22	<i>Bangor</i>	<i>4 pages 12/9/22</i>
1.3 → Electric charge, Electric current, Electrical energy Electrical potential, R-L-C Parameters, Active & Passive Elements.	20/9/22	<i>Bangor</i>	
	21/9/22	<i>Bangor</i>	
1.4 → Energy Source, current and voltage Sources and their Transformation and mutual Induction	22/9/22	<i>Bangor</i>	
1.5 → Star-Delta Transformation.	23/9/22	<i>Bangor</i>	

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SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE THE H.O.D.
<u>UNIT-2</u>			
<u>NETWORK THEOREMS</u>			
2.1 → Nodal & mesh Analysis of electrical circuits with simple problem	24/9/22	<u>Bayer</u>	
	26/9/22	<u>Bayer</u>	
	27/9/22	<u>Bayer</u>	
	28/9/22	<u>Bayer</u>	
	30/9/22	<u>Bayer</u>	
	1/10/22	<u>Bayer</u>	
	12/10/22	<u>Bayer</u>	
	13/10/22	<u>Bayer</u>	
	14/10/22	<u>Bayer</u>	
	17/10/22	<u>Bayer</u>	
2.2 → Thevenin's Theorem, Norton's Theorem, maximum Power Transfer Theorem, Super position Theorem, Millman Theorem, Reciprocity Theorem Statement explanation & Application.	18/10/22	<u>Bayer</u>	
	19/10/22	<u>Bayer</u>	
2.3 → Solve numerical problems of above			
<u>UNIT-3</u>			
POWER Relation in AC circuit & Transient Response of Passive circuit			
3.1 → Definition of frequency, cycle Time period, Amplitude, Average value, Rms value, Instantaneous power & Form Factor, Apparent power, Reactive power, power loss Triangle of AC wave	21/10/22	<u>Bayer</u>	
	22/10/22	<u>Bayer</u>	
	25/10/22	<u>Bayer</u>	
	26/10/22	<u>Bayer</u>	

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12/9/22

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SYLLABUS COVERAGE

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TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
3.2 → phasor representation of Alternating quantities	27/10/22	<i>Bangor</i>	
3.3 → phasor rep. Single phase Ac circuits - Behaviors of Ac through pure resistor Inductor & Capacitor.	29/10/22 31/10/22	<i>Bangor</i> <i>Bangor</i>	
3.4 → DC Transients - Behaviors of R-L, R-C, R-L-C Series circuit & draw the phasor diagram and voltage Form Triangle.	1/11/22	<i>Bangor</i>	<i>Prasanna</i> 12/11/22
	2/11/22	<i>Bangor</i>	
	4/11/22	<i>Bangor</i>	
3.5 → Define Time constant of The above circuit.	5/11/22	<i>Bangor</i>	
3.6 → Solve numerical Simple problems of above circuit.	7/11/22	<i>Bangor</i>	
<u>UNIT-4</u>			
<u>RESONANCE AND COUPLED CIRCUITS</u>			
4.1 → introduction to resonance circuits & Resonance tuned circuit.	9/11/22	<i>Bangor</i>	
	11/11/22	<i>Bangor</i>	
4.2 → Series & Parallel resonance.	12/11/22	<i>Bangor</i>	
4.3 → expression for Series resonance, condition for Resonance, frequency of Resonance, impedance, current	14/11/22	<i>Bangor</i>	
	15/11/22	<i>Bangor</i>	

B.I.E.T. SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
Voltage, power, Q factor and Power factor of Resonance, Bandwidth in term of Q.	16/11/22	<i>Bangor</i>	
4.4 → Parallel Resonance (RL, RC & RLC) & derive the Expression	18/11/22	<i>Bangor</i>	
4.5 → Comparisons of series & Parallel Resonance & Applications.	19/11/22	<i>Bangor</i>	<i>4/11/22</i> <i>12/9/22</i>
4.6 → Simple Problems of above circuit	21/11/22	<i>Bangor</i>	
<u>UNIT-5</u>	22/11/22	<i>Bangor</i>	
5.1 → Laplace Transformation, Analysis and derive the Equations for circuit Parameters of Step response of R-L, R-C & R-L-C	23/11/22	<i>Bangor</i>	
	25/11/22	<i>Bangor</i>	
5.2 → Analysis and derive the Equations for circuit Parameters of impulse response of R-L, R-C, R-L-C,	26/11/22	<i>Bangor</i>	
	28/11/22	<i>Bangor</i>	
	29/11/22	<i>Bangor</i>	

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SYLLABUS COVERAGE

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TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<u>UNIT-6</u>			
6.1 → Network elements, ports in Network (one port, two port)	30/11/22	<i>Bangor</i>	
6.2 → Network configurations (T & Pie)	2/12/22	<i>Bangor</i>	
6.3 → an open circuit (Z-Parameters) Short circuit (Y-Parameters) Parameters - calculate open & short circuit parameters for simple circuits & its conversion.	3/12/22	<i>Bangor</i>	
	5/12/22	<i>Bangor</i>	<i>Pradip</i> 12/9/22
6.4 → h-Parameters (hybrid Parameters) Representation.			
6.5 → Define T-Network & Pie-Network.	6/12/22	<i>Bangor</i>	
<u>UNIT-7</u>			
<u>FILTERS & ATTENUATORS</u>			
7.1 → ideal & practical filters & its Application cut off frequency, pass band & stop band	7/12/22	<i>Bangor</i>	
	9/12/22	<i>Bangor</i>	

B.I.E.T. SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
7.2 → classify filters - low pass, high pass, band pass, band stop filters & study their characteristics	10/12/22 12/12/22 13/12/22	<i>Bangay</i> <i>Bangay</i> <i>Bangay</i>	<i>Pradeep</i> 12/9/22
7.3 → Butterworth filter design	14/12/22	<i>Bangay</i>	
7.4 → Attenuation and Gain, Bel, Decibel & nepers and their relations.	16/12/22 19/12/22	<i>Bangay</i> <i>Bangay</i>	
7.5 → Attenuators & its Applications classification - T-TYPE & Π-TYPE Attenuators.	20/12/22 21/12/22	<i>Bangay</i> <i>Bangay</i>	
<p><i>Pradeep</i> 12.9.22</p>			<p><i>Pradeep</i> 12/9/22</p> <p><i>Jalal</i> 18/11/22</p>