

EET 121 Reading – Unit 1

Section #	UNIT 1 TOPICS	# of Pages
1-3	Scientific Notation	5
1-4	Prefixes	3 ¼
1-5	Converting Units	2 ¼
2-1	Atoms	4
2-2	Charge	2 ¼
2-3	Voltage	4 ¼
2-4	Current	2
3-7	Battery Amp Hr Calculation Pg. 101 Bottom, 102 Top ½	6 ¼
2-6	The Electric Circuit	6 ¾
2-7	Measuring Voltage and Current (Skip Pg. 57 “Meas. Res.”, & Pg. 61 “The Ohm Scale” until Unit 2)	6 ¼
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		Total Pages = 36 ½

EET 121 Reading – Unit 2

Section	TOPIC	Pages
2-5	Resistance Up to page 47 top ¼ Pg. 49 Review	7 ¼
2-7	Measuring Resistance Pg. 57 “Measuring Resistance” only Pg. 61 “The Ohm Scale” only	½
3-1	Ohms Law	4 ½
3-2	Ohms Law Problems	5 ¾
3-3	Energy and Power Definitions	3 ½
3-4	Power Problems	2 ¾
3-5	Resistor Power Ratings (Note: When Measuring Resistance, Remove 1end then measure)	3 ½
Total Pages		27 ¾

EET 121 Reading – Unit 3**Series Circuits**

Section	TOPICS	Pages
4-1	Resistance in Series	2 ½
2-5	Variable Resistors Pg. 47 bottom ¾ & Pg. 48	1 ¾
4-3	Total Resistance	4 ½
4-2	Current in a Series Circuit	1 ½
4-4	Ohms Law in Series Circuits	4 ½
4-5	Voltage Sources in Series	2 ½
4-6	Kirchoff's Voltage Law	3 ¾
4-8	Power in a Series Circuit	1 ½
4-10	Troubleshooting	4 ¼
3-8	Troubleshooting a Basic Series Circuit	3
Total Pages		29 ¼

EET 121 Reading – Unit 4

Section	TOPIC	Pages
5-1	Resistors in Parallel	3
5-2	Voltage in Parallel Circuits	2
5-3	Kirchoff's Current Law The Amp Meter pg.210 thru 212 top ¼	4 2 ¼
5-4	Total Parallel Resistance	6 ½
5-5	Ohms Law in Parallel Circuits	4
5-6	Skip	
5-7	Power in Parallel Circuits	2 ¼
5-8	Troubleshooting	4 ¾
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Total Pages		28 ¾

EET 121 Reading – Unit 5

Section	Topics	Pages
6-1	Identifying Series-Parallel Relationships	5 ½
6-2	Analysis of Series-Parallel Circuits Pg. 235 bottom ½ thru 237	2 ½
4-7	Voltage Dividers	6 ¾
4-9	Circuit Ground	4 ½
6-3	Voltage Dividers w/Loads Pg. 243 bottom ¼ thru 245	2 ¼
6-6	Thevinin's Theorem 255 bottom ½ thru 258 top 2/3 261 bottom 1/3, Pg. 262 top ½	4 ¼
	The Wheatstone Bridge (Balanced) 251 thru 253 top ½	2 ½
6-5	The Wheatstone Bridge (Unbalanced) 253 bottom ½ thru 255	2
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Total Pages		30 ¼

EET 121 Reading – Unit 6

Section	TOPICS	Pages
7-5	Electromagnetic Induction	3 ½
8-1	The Sine Wave	5 ½
8-2	Sinusoidal Voltage Sources thru 341 but skip the last Par	2 ¼
	Pg 342 bottom ¾ Starting at Voltage Amplitude	¾
8-3	V & I values of Sine Waves All but skip Average value on Pg.345	3 ¼
8-4	Sine Wave Angles Pg 348 bottom ½ and Pg 349 Fig. 8-26 Only	¾
8-6	Ohms Law in AC	2 ¼
8-9	The Oscilloscope 365 thru 371	7
	The Function Gen. Pg 372 thru 373	2
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Total		27 ¼

EET 121 Reading – Unit 7

Section	Topics	Pages
9-1	The Basic Capacitor pg. 388 thru 397 top ½	8.5
9-2	Types of Caps	5
9-3	(Skip)	0
9-4	Parallel Capacitors	2
9-5	Caps in DC Circuits pg. 409 thru 412, top 1/3	3.25
9-8	Testing Capacitors pg. 427, 428 top ¼	1.25
	Summary	1
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		Reading Total 21.25

EET 121 Reading – Unit 8

The Capacitor Charge / Discharge Curve

Sec#	Topics	Page # to Read _____	of Pg.
9-7	Capacitors in Timing Circuits	pg. 426 middle; Timing Circuits	1/4
9-5	Charge & Discharge Curves	pg. 411 bottom 1/2 thru pg 416 top 1/2	5

RC TRANSIENT ANALYSIS

Sec#	Topics	# of Pg.
15-1	The RC Integrator	1 3/4
15-2	Response of RC Integrators to a <u>Single</u> Pulse Input (Note: When he uses $1-e^{-t/RC}$, use the Universal Charge Curve)	4 1/2
15-3	Response of RC Integrators to Repetitive Pulse Inputs (Note: When he uses $1-e^{-t/RC}$, use the Universal Charge Curve and for $e^{-t/RC}$ use the Universal Discharge Curve)	5
15-8	R C Timing Circuits 716 bottom 1/2 , 717 top 1/3	3/4

Reading Total = 17 1/4

EET 121 Reading – Unit 9

Sec. #	Topics	Page #	# of Pg
11-1	The Basic Inductor		5 ½
11-2	Types of Inductors		1
11-5	Energizing Current in an Inductor	517 thru 519	3
	De-Energizing Current in an Inductor	520 thru 522 top ¼	2
	Induced Voltage when SW is off in a RL Circuit	523 2 nd par thru Ex 11-7 524 top ¾	1 ½
11-7	Inductor Applications		1 ¼
11-8	Testing Inductors		¾
15-7	Response of RL Differentiation to Pulse Inputs		3 ½
14-1	Mutual Inductance		2
14-2	The Basic Transformer		3 ½
14-8	The Transformer as an Isolation Device		1 ½
		Total # of Pages	25 ½
(optional)	Exponential Formulas and Using the Calculator	524 bottom ¼ thru 526	2 ¼

EET 121 Reading – Unit 10

Section	Topics	Pages	
9-6	Capacitors in AC	416 bottom ¼ thru 420 top ¼	3 ½
10-1	Phase Relationship of RC Circuit		1
9-7	DC Blocking & AC Coupling	424 bottom ½ thru 426	2 ¼
10-8	Coupling an AC signal into a DC Bias Network	481 bottom ½ & 482 top ½	1
9-8	Coupling Caps	428 bottom ½ thru 431	3 ½
11-6	Inductors in AC	Pg 527 thru 529	3
21-1	Phase Relationship of a RL circuit		1
14-4	Step Down Transformers		1
14-5	Loading the Secondary		2
14-9	Transformer Power		2 ¾
Total # of Pages			21

10-9	(Optional) Troubleshooting AC RC Network	
	Pg.482 Bottom ¼	
	483 Top ¾	3 ¾
	485 Bottom ¾ thru	
	487	
12-9	(Optional) Troubleshooting AC RL Network	4
	Pg 575 thru 578	
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	Optional Reading	7 ¾

EET 121 Reading – Unit 11

Section	Topics	Pg #	Pages
9-7	AC Coupling GND	424 bottom ¼ 425 top ½	¾
9-8	Coupling Caps in Amps	428 bottom ½ thru 431	3 ½
9-7	Bypass Caps	425 3 rd par, and 426 top ½	¾
17-2	CE Amp with input Input & output Coupling caps	806 bottom thru 807 top ½	½
4-7	Voltage Dividers	143 bottom ¾ thru 144 top	¾
	Ex4-16	145 top ¾	¾
4-7	Applications of Voltage Dividers	148 bottom ½ and 149 top ½	1
4-8	Determining voltage across an Ungrounded Resistor	154 bottom ¾	¾
17-1	DC Operation of Bipolar Transistor Amplifiers		4
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EET 121 Reading – Unit 12

Section	Topics	Pg #	Pages
17-2	AC signal Operation	803 bottom ¼ thru 806 top ¼	2 ½
9-7	Bypass Caps	425 3 rd par, and 426 top ½	¾
17-2	CE Amp with Output Coupling Cap and Emitter Bypass Cap	806 bottom thru 807 top ½	½
17-2	Emitter Bypass Cap to Inc Voltage Gain Note: His $R_E = \text{my } R_{E1} + R_{E2}$ in lec 12 His $r_e = \text{my } R_{E1}$ in lec 12	807 bottom ¾ thru 808	1 ¾
10-8	Coupling AC Signals into a DC Bias Network	481 bottom ½ 482 top ½	1
10-9	AC Analysis of Voltage Divider Biasing	488 thru 491 top ½	3 ½
17-2	Calculating Z_{in} or R_{in} and A_V of an Amp	809 bottom ½ thru 810	1 ¾
Reading Total			11