



#### CAMPUS: \_\_\_\_CENTURION\_

Lecture's Name	Subject	Торіс	Date From	Date To
KOEN	ELECTRO N4	Principles of Electricity	5/4/2020	5/8/2020
Week Number:1	To understand serie	Objective /Learning Outcome and parallel theory and calculations coils temp coeff capacitors	Teaching Resources/Aids textbook white board	Length of period 1hour15 min

Week Days	Objectives	Activ	Activities		Lesson Completed	
		What will the lecturer do?	What will students do?		Yes	No
Monday	After this lesson the learner must be able to do the calculations and study the theory	Serie and parallel theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to do the calculations and	Serie and parallel theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

	study the theory					
Wednesday	After this lesson the learner must be able to do the calculations and study the theory	coils temp coeff	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		Teaching Methodology (Demonstration, Discussions, Practical, etc)	Lesson Completed	
		What will the lecturer do?	What will students do?		Yes	No
Thursday	After this lesson the learner must be able to do the calculations and study the theory	capacitors	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to do the calculations and study the theory	Revision	Do class work and home work in exercises	Demonstration, Discussions,	Yes	





## CAMPUS: \_\_\_\_CENTURION\_\_\_

Lecture's Name	e Subject Topic		Date From	Date To	
KOEN	ELECTRO N4	AC THEORY	5/11/2020	5/15/2020	
Week	Learning	Objective /Learning Outcome	Teaching	Length of	
Number:2	To understand AC Circ	cuit theory: The following are only to be applies to	<b>Resources/Aids</b>	period	
	single phase systems: Gene	erating an emf. Ohm's law (and units); inductance;	textbook white	1hour15 mir	
	capacitance; reactance; imp	bedance; Lenz's law; simple phasors (vectors); leading	board		
	and lagging power factors;	simple calculations with RLC circuits; resonant			
	frequency; introduction to	types of waveforms; peak values of sine wave, rms			
	value of sin wave, average	value of sine wave, power in sine waves.			
		theory and calculations			

# ACTIVITIES

Week Days	Objectives	Activities		(Demonstrably, Discussions, Practical, etc)	Less Comp	
		What will the lecturer do?	What will students do?		Yes	No
Monday	After this lesson the learner must be able to do the calculations and	Single phase systems: Generating an emf. Ohm's law (and units);	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

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	study the theory	inductance;capacitance ; reactance; impedance				
Tuesday	After this lesson the learner must be able to do the calculations and study the theory	Lenz's law; simple phasors (vectors); leading and lagging power factor	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Wednesday	After this lesson the learner must be able to do the calculations and study the theory	simple calculations with RLC circuits; resonant frequency; introduction to types of waveforms	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
				Tee shing Methodeless.	-	
Week Days	Objectives	Activ	/ITIES	(Demonstrably, Discussions, Practical, etc)	Les: Comp	
Week Days	Objectives	Activ What will the lecturer do?	/ITIES What will students do?		Less Comp Yes	
Week Days Thursday	After this lesson the learner must be able to do the calculations and study the theory	What will the lecturer	What will students		Comp	leted

Senior/HoD Signature

LESSON PLAN





### CAMPUS: \_\_\_\_CENTURION\_

Lecture's Name			Date From	Date To
KOEN	ELECTRO N4 INDUCTION MACHINES		5/18/2020	5/22/2020
Week	Learning	Objective /Learning Outcome	Teaching	Length of
Number:3		ansformers: Principle of operation of single phase	<b>Resources/Aids</b>	period
	transformer. Construction	on of single phase transformers. Simple calculations	textbook white	1hour15 min
	0	turns, flux, losses and. efficiency; elementary phasors;	board	
	designing a simple sing	gle phase transformer <b>theory and calculations</b>		

Week Days	Objectives	Activities		(Demonstrably, Discussions, Practical, etc)	Lesson Completed	
		What will the lecturer do?	What will students do?		Yes	No
Monday	After this lesson the learner must be able to do the calculations and study the theory	Transformers: Principle of operation of single phase transformer	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to do the calculations and	Construction of single phase transformers	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

	study the theory					
Wednesday	After this lesson the learner must be able to do the calculations and study the theory	. Simple calculations involving: currents, volts), turns, flux, losses	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ	vities	(Demonstrably, Discussions, Practical, etc)	Less Comp	
		What will the lecturer do?	What will students do?	_	Yes	No
Thursday	After this lesson the learner must be able to do the calculations and study the theory	efficiency; elementary phasors	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to do the calculations and study the theory	designing a simple single phase transformer	Do class work and home work in exercises	Demonstration,Discussions,	Yes	





## CAMPUS: \_\_\_\_CENTURION\_\_\_

Lecture's Name	Subject	Торіс	Date From	Date To
KOEN	ELECTRO N4	AC MACHINES	5/25/2020	5/29/2020
Week Number:4	<b>To understand</b> A construction and operations. Induction mot reversing circuits. St	<b>Objective /Learning Outcome</b> C Machines: Single and three phase motors (use, tion. Single phase alternator (use, construction arid for, reverse phase and single phase faults. Starting and andard ratings. Temperature rise calculations and of insulation <b>theory and calculations</b>	Teaching Resources/Aids textbook white board	Length of period 1hour15 min

Week Days	Objectives		Activities		Lesson Completed	
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to do the calculations and study the theory	AC Machines: Single and three phase motors (use, construction and operation	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Tuesday	After this lesson the learner must be able to do the calculations and study the theory	Single phase alternator (use, construction arid operations.	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Wednesday	After this lesson the learner must be able to do the calculations and study the theory	Induction motor, reverse phase and single phase faults	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ	Activities Teaching Metho (Demonstrably, Discussions, F			Less Comp	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to	Starting and reversing circuits. Standard	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
	do the calculations and study the theory	ratings					





### CAMPUS: \_\_\_\_CENTURION\_\_

Lecture's Name	Subject	Торіс	Date From	Date To
KOEN	ELECTRO N4	Generation.and supply	6/1/2020	6/5/2020
Week	Learning	Teaching	Length of	
Number:5	To understand Generati	ion.and supply of AC power: Generation of supply.	<b>Resources/Aids</b>	period
	Sources of energy. Network	k diagram (supplier to consumer).	textbook white	1hour15 min
	1	theory and calculations	board	

Week Days	Objectives		Teaching Methodology			
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to explain the of Generation.and supply	Generation.and supply of AC power	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to explain the of	Generation of supply	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

	Generation.and supply						
Wednesday	After this lesson the learner must be able to explain the of Generation.and supply	Sources of energy	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ			g Methodology y,Discussions,Practical,etc)	Lesson Completed	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of Generation.and supply	Network diagram (supplier to consumer).	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of Generation.and supply	REVISION	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	





## CAMPUS: \_\_\_\_CENTURION\_\_\_

Lecture's Name	Subject Topic		Date From	Date To
KOEN	<b>ELECTRO N4</b>	Measuring instruments	6/8/2020	6/12/2020
Week Number:6	<b>To understand</b> Me movement Ammeter, vol	<b>J Objective /Learning Outcome</b> asuring instruments: Moving coil and moving iron tmeter and ohm—meter; range changing Wheatstone tical applications <b>theory and calculations</b>	Teaching Resources/Aids textbook white board	Length of period 1hour15 min

Week Days	Objectives		Activities			son leted
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to explain the of	Measuring instruments	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to explain the of	: Moving coil and moving iron movement Ammeter, voltmeter and ohm— mete	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Wednesday	After this lesson the learner must be able to explain the of	range changing	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ	vities		g Methodology y,Discussions,Practical,etc)	Lesson Completed	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of	Wheatstone bridge and its practical applications	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of	REVISION	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	





## CAMPUS: \_\_\_\_CENTURION\_

Lecture's Name			Date From	Date To
KOEN	ELECTRO N4	REVISION	6/15/2020	6/19/2020
Week Number:7	Learning To understand .theory and calculatio	g Objective /Learning Outcome	Teaching Resources/Aids textbook white board	Length of period 1hour15 min

MondayAfter this lesson the learner must be able to explain the of Switchgear and protective devicesSwitchgear and protective devices:Do class work and home work in exercisesDemonstrat Discussions, Discussions, Do class work and home work in exercisesDemonstrat Discussions, Discussions, Discussions, Discussions, Discussions, Discussions, Discussions, Discussions, Discussions, Discussions,TuesdayAfter this lesson the learner must be able toElectromagnetic control devicesDo class work and home work in exercisesDemonstrat Discussions, Discussions, Discussions,	Week Days	Objectives		Activities		Lesson Completed	
Iearner must be able to explain the of Switchgear and protective devicesprotective devices:work in exercisesDiscussions,TuesdayAfter this lesson the learner must be able toElectromagnetic 				What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
learner must be able to control devices work in exercises Discussions,	Monday	learner must be able to explain the of Switchgear	-		Demonstration, Discussions,	Yes	
and protective devices	Tuesday	learner must be able to explain the of Switchgear	e		Demonstration, Discussions,	Yes	

Wednesday	After this lesson the learner must be able to explain the of Switchgear and protective devices	Solid state control:	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ	vities		y,Discussions,Practical,etc)	Lesson Completed	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of Decimal — binary number systems	Decimal — binary number systems. Logic gates and equivalent circuits. Truth table. Basic logic circuits.	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of Rectification	Rectification: Single phase and three.phase operation. Single phase filter circuits and phase control	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	





### CAMPUS: \_\_\_\_CENTURION\_\_\_

Lecture's Name	Subject	Date From	Date To	
KOEN	ELECTRO N4	Switchgear and protective devices	6/22/2020	6/26/2020
Week Number:8	Learning To understand theory and calculatio	g Objective /Learning Outcome ns	Teaching Resources/Aids textbook white board	Length of period 1hour15 min

Week Days	Objectives		Teaching Methodology	Less Comp		
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to explain the of theory and calculations	theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to explain the of theory and calculations	theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Wednesday	After this lesson the learner must be able to	theory and calculations	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	explain the of theory and calculations Objectives	Activ	rities		g Methodology	Les	son
				(Demonstrably, Discussions, Practical, etc)			
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of theory and calculations	theory and calculations.	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of theory and calculations	theory and calculations	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	





### CAMPUS: \_\_\_\_CENTURION\_\_

Lecture's Name	Subject	Торіс	Date From	Date To	
KOEN	ELECTRO N4 REVISION		6/29/2020	7/3/2020	
Week	Learning	Objective /Learning Outcome	Teaching	Length of	
Number:9	To understand		<b>Resources/Aids</b>	period	
	theory and calculations		textbook white	1hour15 min	
			board		

Week Days	Objectives	Activities		Teaching Methodology	Lesson Completed	
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to explain the of theory and calculations s	theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the learner must be able to explain the of Switchgear and protective devices	Electromagnetic control devices (contactors); fuses.	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Wednesday	After this lesson the learner must be able to explain the of Switchgear and protective devices	Solid state control:	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		Teaching Methodology (Demonstrably, Discussions, Practical, etc)		Lesson Complete	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of theory and calculations	theory and calculations	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of Switchgear and protective devices	Rectification: Single phase and three.phase operation. Single phase filter circuits and phase control	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	





# LESSON PLAN

## CAMPUS: \_\_\_\_CENTURION\_\_\_

Lecture's Name	e Subject Topic		Date From	Date To	
KOEN	ELECTRO N4 REVISION		7/6/2020	7/10/2020	
Week	Learning	g Objective /Learning Outcome	Teaching	Length of	
Number:10	To understand		<b>Resources/Aids</b>	period	
	theory and calculation	ns	textbook white board	1hour15 min	

#### ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology	Lesson Completed	
		What will the lecturer do?	What will students do?	(Demonstrably,Discussio ns,Practical,etc)	Yes	No
Monday	After this lesson the learner must be able to explain the of theory and calculation	theory and calculation	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Tuesday	After this lesson the	theory and	Do class work and home	Demonstration,	Yes	

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	<b>learner must be able to</b> <b>explain the of</b> Switchgear and protective devices	calculation	work in exercises		Discussions,		
Wednesday	After this lesson the learner must be able to explain the of theory and calculation	theory and calculation	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activ	vities	Teaching Methodology (Demonstrably, Discussions, Practical, etc)		Lesson Completed	
		What will the lecturer do?	What will students do?			Yes	No
Thursday	After this lesson the learner must be able to explain the of theory and calculation	theory and calculation	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of theory and calculation	theory and calculation	Do class work and work in exercises	home	Demonstration, Discussions,	Yes	