

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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	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	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

Lecture's Name	Subject	Topic	Date From	Date To
KOEN	ELECTRO N4	AC THEORY	5/11/2020	5/15/2020
Week Number:2	Learning Objective /Learning Outcome To understand AC Circuit theory: The following are only to be applies to single phase systems: Generating an emf. Ohm's law (and units); inductance; capacitance; reactance; impedance; Lenz's law; simple phasors (vectors); leading 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		Teaching Resources/Aids textbook white board	Length of period 1hour15 min

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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	Single phase systems: Generating an emf. Ohm's law (and units);	Do class work and home work in exercises	Demonstration,Discussions,	Yes	

	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	
Week Days	Objectives	Activities		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 do the calculations and study the theory	peak values of sine wave, rms value of sin wave, average value of sine wave	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	Power in sine waves.	Do class work and home work in exercises	Demonstration,Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

Lecture's Name	Subject	Topic	Date From	Date To
KOEN	ELECTRO N4	INDUCTION MACHINES	5/18/2020	5/22/2020
Week Number:3	Learning Objective / Learning Outcome To understand Transformers: Principle of operation of single phase transformer. Construction of single phase transformers. Simple calculations involving: currents, volts), turns, flux, losses and. efficiency; elementary phasors; designing a simple single phase transformer theory and calculations		Teaching Resources/Aids textbook white board	Length of period 1hour15 min

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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	Activities		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 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	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

Lecture's Name	Subject	Topic	Date From	Date To
KOEN	ELECTRO N4	AC MACHINES	5/25/2020	5/29/2020
Week Number:4	Learning Objective /Learning Outcome To understand AC Machines: Single and three phase motors (use, construction and operation. Single phase alternator (use, construction and operations. Induction motor, reverse phase and single phase faults. Starting and reversing circuits. Standard ratings. Temperature rise calculations and types/clauses of insulation theory and calculations		Teaching Resources/Aids textbook white board	Length of period 1hour15 min

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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	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 and operations).	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	Induction motor, reverse phase and single phase faults	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 do the calculations and study the theory	Starting and reversing circuits. Standard ratings	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	Temperature rise calculations and types/classes of insulation	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 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 home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 Generation.and supply	Network diagram (supplier to consumer).	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of Generation.and supply	REVISION	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 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 home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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	Wheatstone bridge and its practical applications	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Friday	After this lesson the learner must be able to explain the of	REVISION	Do class work and home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 explain the of Switchgear and protective devices	Switchgear and protective devices:	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 home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 Decimal — binary number systems	Decimal — binary number systems. Logic gates and equivalent circuits. Truth table. Basic logic circuits.	Do class work and home work in exercises	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 home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 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 explain the of theory and calculations	theory and calculations	Do class work and home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 calculations	theory and calculations.	Do class work and home work in exercises	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 home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 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 home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 calculations	theory and calculations	Do class work and home work in exercises	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 home work in exercises	Demonstration, Discussions,	Yes	

LESSON PLAN

CAMPUS: CENTURION

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

ACTIVITIES

Week Days	Objectives	Activities		Teaching Methodology (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 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	

	learner must be able to explain the of 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 home work in exercises	Demonstration, Discussions,	Yes	
Week Days	Objectives	Activities		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 home work in exercises	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 home work in exercises	Demonstration, Discussions,	Yes	

Lecturer Signature

Senior/HoD Signature