

MOTOR & TRANSFORMER REWINDING COURSE (602&702) – PCP (THEORY & PRACTICAL) TRAINING
SCHEDULE

18/01/2019

Total course duration (400hrs)		
PCP (140hrs)		Self learning (260 hrs)
Practical (90hrs)	Theory (50hrs)	

Week	Schedule		PCP- Topic		Instruction to instructor	Learning outcomes		
	Topic	Day	Dur ation (Hr)	Theory			Dura tion (Hr)	Practical
Week 1	Single Phase transformer	DAY 1	1 hr	<ul style="list-style-type: none"> Transformer and its main parts. Principle of transformer E.M.F. equation. 	3 hrs	<ul style="list-style-type: none"> Demonstrate the various parts of transformer and their identification. Identification of the primary and secondary terminals of a single phase transformer. Dismantling and reassembling of a step-up and step-down transformer. 	<ul style="list-style-type: none"> With the help of charts and audio-visual aids demonstration of various parts and connections of a single phase transformer should be done. 	<ul style="list-style-type: none"> Learner would be able to :- <ul style="list-style-type: none"> identify transformer and its types as per voltage and its main parts. differentiate between primary and secondary terminals of a single phase transformer. state the E.M.F equation and transformation ratio. carry out dismantling and reassembling of the transformer.
	Single Phase transformer	DAY 2	2 hrs	<ul style="list-style-type: none"> Construction and working of potential and current transformer. Clip on meter Working principle, 	3hrs	<ul style="list-style-type: none"> Loading the single phase transformer and measuring current and power on both sides. Finding the efficiency of a 	<ul style="list-style-type: none"> Safety precaution should be taught before making connection of potential and current transformer. Observation of efficiency and losses 	<ul style="list-style-type: none"> Learner would be able to :- <ul style="list-style-type: none"> identify the parts of potential and current transformer, auto transformer. carry verification process of

Week 2	Three phase transformer	DAY 1	1 hrs	<ul style="list-style-type: none"> Construction and working of three phase transformer. Function of its various parts:- conservator, breather and Buchholz relay 	3 hrs	<ul style="list-style-type: none"> Studying the parts of power transformer and also the function of conservator breather. Recharging a breather. Cleaning and maintenance of a transformer. 	<ul style="list-style-type: none"> Arrange for a dismantle transformer. Recharging and cleaning of transformer must be practiced.
	Three phase transformer	DAY 2	2hrs	<ul style="list-style-type: none"> Different system for coiling of 3 phase transformer. 	3hrs	<ul style="list-style-type: none"> Connecting three phase transformer as start-star, Delta- 	<ul style="list-style-type: none"> Safety precaution should be taught before making
				<ul style="list-style-type: none"> construction and uses of auto transformer. Application of different type of single phase transformers. Transformer losses and efficiency. 		<ul style="list-style-type: none"> transformer. Verifying transformer ratio, testing of an auto transformer. Finding iron & copper losses by performing open circuit and short circuit test. 	<ul style="list-style-type: none"> should be recorded by individual and a comparison may be done.
						<ul style="list-style-type: none"> should be recorded by individual and a comparison may be done. 	<ul style="list-style-type: none"> transformer ratio. carry out dismantling and reassembling of different type of single phase transformers. carry out measurements of current and power of a single phase transformer. calculate transformer losses and efficiency.
							<ul style="list-style-type: none"> Learner would be able to:- identify parts of transmission and distribution transformer. differentiate between single phase and three phase transformer. define Working and construction of conservator, breather and Buchholz relay. carry out assembling & dismantling of transformer. adopt appropriate maintenance procedure for a transformer.
							<ul style="list-style-type: none"> Learner would be able to: differentiate different system of coiling of 3

