

Generator steady state operation	33
Symmetrical fault studies.	36
Saturated Synchronous Reactance	37
Unbalanced Faults: Sequence Reactances	40
AC Generator Tests: Parameter Evaluation	41
Synchronising	47
Experiments	53
Safety	53
Synchronisation, Supply Frequency and Loads	53
Experiment 1: Generator Frequency and Voltage Control	55
Experiment 2: Generator Armature Voltage/Field Current Characteristics ...	57
Experiment 3: Generator Voltage/Speed Characteristic	59
Experiment 4: Generator Open Circuit Test	62
Experiment 5: Generator Short Circuit Test	66
Experiment 6: Load Test and Voltage Regulation	70
Experiment 7: Zero Power Factor Test	75
Experiment 8: Measurement of X_d and X_q	77
Experiment 9: Sudden Short Circuit Test	80
Experiment 10: The Protection Relay	82
Experiment 11: Synchronising the Generator to the Mains Supply.	85
Experiment 12: Control of Generator Power and Reactive Power.	87