

# **Phase 1**

## **Re-cap**

### **And**

# **Carousel 3 Test**

## **Revision**

*Basic Principles of electricity*

*Voltage, Current , Resistance*

*Cables*

*Generation, distribution and Voltage Levels*

*Wire Colour Codes*

*Resistors and capacitors in series and Parallel*

*Ohms Law and Power Calculations*

*Wiring support systems Conduit ,Tray and Trunking*

IET Regulations

Domestic wiring

Protection RCD's Fuses MCB's

How to wire sockets, Lights and plugs

*Calculating fuse sizes*

*Testing for dead*

Switches and Isolators

Rectifiers and Power supplies

*Lighting Types, working principles, components, emergency lighting.*

*Inductance and Power Factor (leading and Lagging)  
Power factor formulas.*

*Motors principles control and calculations including power and full load current, DOL, Safety circuits. Star and Delta.*

*Semiconductors - Transistors (FET and Bipolar) Diodes, Bridge Rectifiers*

*Measurement Data Tables and conversions.*

*Logic - Gates, TTL, Cmos, Binary, Truth Tables, Boolean.*