

Lesson 9 – QUESTIONS

Q1 Complete the following table with regards to 240 V wiring.

Wire	Colour	Voltage to Ground
Active		
Neutral		
Earth		

Q2 Looking at the pin end of a three-pin plug, identify the terminals.



Q3 What is a power supply?

Q4 What are the advantages of a linear power supply.

Q5 What are the disadvantages of a switch mode power supply?

Q6 What are the five zones of a linear power supply and explain each?

Q7 What is the difference in the output of a half wave rectifier compared to a full wave rectifier?

Q8 Describe how a full wave rectifier works.

Q9 What size filter capacitor is needed to restrain the ripple voltage to 0.25 V with a load of 200 mA and the frequency of 100 Hz?

Q10 Draw the block diagram of a SMPS and name the parts.

Q11 Why is a RCD better than a fuse?

Q12 Calculate a possible filter capacitor for the following output.

- Current draw is 1.5 A
- Ripple frequency is 100 Hz
- P to P voltage is 0.5 V