Sample Questions

1. What is electricity
2. What is static electricity
3. Describe the difference between an insulator and conductor
4. Provide examples of insulators and conductors
5. What is an electrical circuit
6. What is direct current
7. What is the difference between conventional current flow and electron flow
8. What is power
9. What is energy
10. Provide an example a power and energy
11. Describe voltage
12. Provide examples of a voltage source
13. Describe *voltage drop* and what the polarity means
14. Describe current
15. Describe charge
16. Describe resistance
17. Use an analogy to describe the voltage, current, charge, and resistance
18. What does an open in a circuit mean
19. What does a short in circuit mean
20. What is the typical line voltage in Belize
21. How is amperage calculated on an appliance
22. What is a *specification sheet* for a device
23. What are *series* and *parallel* circuits
24. Provide an example of a *series* and *parallel* circuit
25. What is *Kirchhoff’s Voltage Law*
26. What is *Kirchhoff’s Current Law*
27. How is the electrical quantities, *current, voltage, and resistance* calculated in a *series* and *parallel* circuit
28. What is a *thermocouple* and what is it used for
29. What is *Maximum Power Transfer Theorem* and its impact on circuit design
30. What is *Internal Resistance* and its impact on circuit design
31. Define *amp-hour* and what is it used to measure
32. What happens to batteries when they are connected in series
33. What happens to batteries when connect in parallel
34. What rating must be the same for batteries when connecting in series
35. What r What rating must be the same for batteries when connecting in parallel
36. Why might batteries be connected in series
37. Why might batteries be connected in parallel
38. What is *overcurrent protection* and why is it important
39. How is overcurrent protection configured in a series circuit and a parallel circuit
40. What is a conductor’s current-carrying limit known as