

## **PRACTICAL**

### Section 20 – Answers

1. Why should you always disconnect the power on a device before accessing the internal circuitry?  
**This reduces the chance of electrocution or shock.**
2. What is an RCD and why is it used?  
**Residual Current Device. Disconnects the power if there is a leakage of electricity.**
3. Why is an RCD better than a fuse?  
**A fuse operates by having the maximum current flow through and melt the fuse. If this is going through a person, the current could be lethal. An RCD cuts the current of at very low leakage levels.**
4. What is a lightning arrestor and why are they important?  
**A lightning arrestor should divert all electrical current from the lightning to ground if your antennas are struck.**
5. Can you get a RF burn from the transmission line or the antenna?  
**Yes. High power can produce high voltages in transmission lines and antennas.**
6. When disconnecting equipment, should the earth be disconnected first or last?  
**Connect first and disconnect last.**
7. You buy an older transceiver and what to repair the device. You disconnect the power and open the case. What would be some devices inside the transceiver that you should treat with caution?  
**Large capacitors can hold a high voltage charge for long periods. Valves require high voltages and can retain the voltage. Valves depend on internal heaters so some valves can get very hot.**