1. What is the basic function of a lighting control system? Energize or de-energize a fixture or group or cause some alteration to normal operation. (dim or flash)

2. Which aspect of lighting control is not just a switch? Dimmer

3. What is considered maintenance of snap switches? Replacement

4. Which dimmers have the longest life? Solid-state

5. How are large numbers of fluorescent lights dimmed? Auxiliary dimming ballasts

6. How do photocells work? Generate a voltage when light falls on it opening a switch or operating a relay which opens a switch.

7. What is the result of a photocell being installed facing a dark or shadowed area? Come on prematurely and stay on longer than necessary.

8. How are photocells tested? Light source and multimeter or hold hand over the eye and see if it comes on.

9. How are most mechanical timers operated? Synchronous motor with spring-wound carry-over.


11. What is the advantage of a lighting contactor? Many lights can be controlled at a time by a low wattage device.

12. What is another name for a lighting contactor? Relay

13. What is indicated by a bluish tinge on contacts in a contactor? Excessive heat

14. What should be done with pitted contacts? Replaced

15. What are the three basic groups of remote control switching systems? Three-wire, two-wire, and wireless.
Incandescent Lighting

1. What type of energy is light? Radiant

2. How do light rays travel when unaffected by other forces? Straight lines

3. What are the two methods of producing artificial light? Heating a filament to high enough temp to produce light or exciting a gas in a partial vacuum.

4. What is the meter used to measure light? Photometer

5. What is a foot-candle? Illumination from one candle power source at a distance of one foot.

6. How does a foot-candle meter work? Light falls on a photronic cell and produces voltage which forces current through a micro-ammeter moving a pointer along a scale.

7. What are the three types of material used in direct lighting? Transparent, translucent, and opaque.

8. What color walls will reflect the most light? Flat white.

9. What is the most efficient type of lighting system? Direct

10. What is the efficiency of semi-direct lighting? 60-90%

11. What is one big advantage of indirect lighting? Minimum glare

12. What type of lighting is typically used in offices and commercial establishments? Semi-indirect and indirect.

13. How high should direct lighting fixtures be mounted? As high as possible but within reach of a ladder for maintenance.

14. What is the coefficient of utilization? Ratio of light leaving the source to the light at the work surface.
15. What is the maintenance factor for a very clean area? 88%

16. What is the most common voltage for lighting systems in residential applications?
   Industrial? 120V