

Designing With Light

Chapter 12 Self-Evaluation

1. When a circuit is closed the lights are on.
 - a. True
 - b. False
2. Good electrical engineering practice says that we can load a circuit to what percentage of its rating?
 - a. 20%
 - b. 50%
 - c. 80%
 - d. 100%
3. Why do lighting designers need to think about controls? (select all that apply)
 - a. Energy savings
 - b. Code requirements
 - c. Maintain design integrity
 - d. Electrical engineers don't design controls
4. What type of dimming is used with electronic transformers, some dimming ballasts, and some LED luminaires?
 - a. Resistance dimming
 - b. Reverse phase dimming
 - c. Dimming ballasts
 - d. DALI
5. What two technologies are frequently used in occupancy sensors?
 - a. Passive infrared
 - b. Active infrared
 - c. Ultrasonic
 - d. Megasonic
6. What are the advantages of a control system over separate control components? (select all that apply)
 - a. Reduced cost

- b. Reduced wall clutter
 - c. Settings saved in internal memory
 - d. Integration with sensors
7. What control protocol is often used with multi-colored LED luminaires?
- a. 0-10V DC
 - b. DALI
 - c. DMX
 - d. USB
8. Lighting control systems can exchange information with other building systems.
- a. True
 - b. False
9. What are some common control system features? (select all that apply)
- a. Time of day events
 - b. Calendar events
 - c. Control of external devices
 - d. Input from external devices
10. What is commissioning?
- a. Design of a control system
 - b. Installation of a control system
 - c. Set-up and programming of a control system
 - d. Daily use of a control system

Answers are on the next page

Answers:

- 1) A
- 2) C
- 3) A, B, C
- 4) B
- 5) A, C
- 6) B, C, D
- 7) C
- 8) A
- 9) A, B, C, D
- 10) C