

Energy Estimation and Audit

ALM-2

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1Q) Explain the working of fluorescent lamp.

A) A fluorescent lamp works by using Electricity to Excite mercury vapor, which in turn produces ultraviolet (UV) light.

- 1) Construction
- 2) Starting
- 3) Mercury vapor
- 4) phosphor Coating
- 5) Light Emission
- 6) Efficiency
- 7) Ballast.

Overall, the Combination of gas Excitation and phosphor fluorescence allows fluorescent lamps to produce bright, efficient lighting suitable for a variety of applications.

3a) Describe the Energy Conservation opportunities using Lighting System in Industries.

A) Energy Conservation in Industrial Lighting System Can lead to Significant Cost Savings and reduced Environmental Impact.

- 1) LED Lighting
- 2) Occupancy Sensors
- 3) Daylight Harvesting
- 4) Lighting Design and layout
- 5) Regular maintenance
- 6) Energy-Efficient fixtures
- 7) Smart Lighting Controls
- 8) Voltage optimization
- 9) Employee Training and awareness
- 10) Monitoring and analytics.