1. An energy modeler has been assigned a renovation project with the following specifications:
• 10,000 ft2 (929 m2), 3-story office building
• 1,000 ft (304.8 m) elevation
• hot, humid climate
The building owner wants to utilize daylighting and time-clock lighting controls to reduce energy use in the renovated building. Of the following inputs, which is the most important for developing a model that supports the owner's goals?

A. occupancy profile
B. wall construction
C. outdoor temperature
D. indoor relative humidity

Objective 1C
Task 2
Analysis
Answer: A

2. The percentage of heat gain that is typically assigned to the plenum for a recessed fluorescent luminaire without venting is

A. 0.
B. 30.
C. 60.
D. 80.

Objective 2D
Task 3
Recall
Answer: B

3. A design team has identified energy improvements for an existing building. The energy model estimates that the annual savings will be US $1,000. If the time horizon is 30 years and the discount rate is 3%, what is the net present value (US $) of the energy savings?

A. 15,900
B. 19,600
C. 25,300
D. 30,000

Objective 4C
Task 2
Application
Answer: B