QUIZ: REDUCING AIR LEAKS (from the BOC Bulletin, Winter/Spring 2018)

1) Which of the following is NOT a factor that affects building air leakage?

    A. Cracks around windows, doors, dampers and skylights
    B. Exterior lighting
    C. Direction and duration of the wind
    D. Pressure differences inside and outside the building

2) What characteristics of the building plan will affect the amount of infiltration and exfiltration?

    A. The number of doors and windows.
    B. Placing wind barriers in front of doors and window subject to high wind velocities.
    C. Orienting the center of a U-shaped building away from prevailing winds.
    D. All of the above

3) As warm, low-pressure air rises through a building, it tends to draw with it the cooler, high-pressure air from lower levels. What is this called?

    A. Ventilation effect
    B. Wind effect
    C. Stack effect
    D. Pressure effect

4) In winter, reducing air temperatures in stairwells is an effective way to reduce infiltration from:

    A. Combustion effect
    B. Wind effect
    C. Ventilation effect
    D. Stack effect

5) What is an example of a tool used to measure air leakage rates in buildings?

    A. Thermal imaging camera
    B. Blower door
    C. Smoke pencil
    D. Data logger

6) What is a safe and effective way to reduce air leakage around openings used for electrical conduits, piping, and outdoor air louvers?

    A. Caulk and weather-strip

B. Install gaskets

C. Cover with plastic sheeting

D. A & B

7) In high winds, a negative pressure is often created on the side of a building opposite the wind (referred to as the leeward side). What is the effect of negative pressure on building air leakage?

A. May force outside air into the building through openings in the leeward side.

B. May force inside air out of the building through openings in the leeward side.

C. Is unlikely to have any effect on air leakage.

D. Is likely to increase building moisture levels.

Answers: 1B, 2D, 3C, 4D, 5B, 6D, 7A