1. A thermostat, which is sometimes installed in the return air duct, serves primarily to:

- a) limit temperature of the heated outside air
- b) control the throttle of the steam in the tubes
- c) sense the temperature of the steam in the coils
- d) minimize temperature fluctuations in discharge air
- e) heat recirculated air

2. Air vents are:

- a) not required when an inverted bucket steam trap is used
- b) not required on the steam mains if an inverted bucket steam trap is used at the steam coil
- not required at the steam coil if a float and thermostatic trap is used at the steam coil with an atmospheric return and the steam main is adequately vented
- d) not required anywhere if a float and thermostatic trap is used at the steam coil
- e) required only with hot water coils

3. Ethylene glycol used in glycol coils:

- a) has a higher heat transfer efficiency than hot water
- b) has less friction losses in the coil and piping than hot water
- c) requires a smaller pump and less horsepower than hot water
- d) has much lower pressure drops through the coil and piping
- e) have a lower heat transfer efficiency than hot water

4. In a hot water coil which of the following is not included for providing a good guideline for the correct application of the system with minimal possibility of freeze-up?

- a) positive air venting of the coil is essential
- b) the air velocity should exceed 10 m/s
- c) a constant flow of water should be fed to the coil
- d) the water velocity should exceed 0.8 m/s
- e) the water temperature should be maintained at a reasonable preset temperature

5. The flow arrangement best suited for hot water coils is:

- a) the counter flow arrangement because it is more efficient
- b) the parallel flow arrangement because it gives better protection against freezing
- c) one in which the cold air enters the coil where the coldest water is flowing
- d) the half serpentine
- e) the triple bypass flow arrangement

Answers 1 = d, 2 = c, 3 = e, 4 = b, 5 = b