Skill Development Exercises for Chapter 5

5-1. Natural ventilation systems are most applicable when the building will produce a significant stack effect:

a) True b) False

Answer: a, True

5-2. Care must be taken in exhaust systems to minimize:

a) Corrosion b) Dissolution c) Melting d) All of the above

e) None of the above

Answer: d

5-3. All other things being equal, ductwork is least subject to condensation corrosion when the runs are:

a) Long and horizontal b) Short and vertical

c) Direct to the terminal discharge

d) All of the above e) None of the above

Answer: c

5-4. Kitchen air pressure should be kept _____ relative to other areas.

a) Positive b) Neutral c) Negative d) All of the above e) None of the above

Answer: c

Negative pressure compared to surrounding areas, so that kitchen odors and moisture do not spread into surrounding areas.

5-5. Smoke movement is driven by:

a) Stack effect b) Buoyancy c) Expansion d) All of the above

e) None of the above

Answer: d

5-6. To prevent smoke infiltration on a fire floor, a pressurized stairwell must maintain a _____ pressure difference across a closed stairwell door.

a) Positive b) Neutral c) Negative d) All of the above e) None of the above

Answer: a

5-7. Health facility ventilation requires:

a) Little need for accurate control of temperature and humidity
b) Free movement of air between departments
c) Removal of airborne microorganisms
d) All of the above e) None of the above

Answer: c

Accurate temperature and humidity control are critical in some areas, and free movement of air between departments must be avoided where infections could be passed from one area to another.