



## Sample CHD Exam Questions

**1. Through coordination with an acoustic engineer, it is discovered that the AHU supply fan produces too much noise to fulfill NC-40 inside office rooms. The HVAC designer needs to use a duct silencer. The BEST position for the duct silencer is**

- A. as close to the fan as possible.
- B. upstream of the first supply air device.
- C. downstream of the fan after the first elbow.

Content Area: 4

Task: Q

Level: Application

Answer: A

**2. A steam pressure-reducing station will be installed to reduce saturated steam at 150 psig (1003 kPa gage) to a utilization pressure of 10 psig (69 kPa gage). The energy of the entering steam is 1,196.0 Btu/lb (2781.9 kJ/kg). How much energy is lost per pound of steam passing through the pressure-reducing station?**

- A. 0.0 Btu/lb (0 kJ/kg)
- B. 35.4 Btu/lb (82.3 kJ/kg)
- C. 70.8 Btu/lb (164.7 kJ/kg)

Content Area: 1

Task: X

Level: Application

Answer: A

**3. What is the allowable leakage in a piping installation?**

- A. 0%
- B. 0.5%
- C. 1%

Content Area: 1

Category: Task: Y

Level: Recall

Answer: A

**4. A fan catalog indicates that for standard air at a given speed, the fan static pressure of a SWSI centrifugal fan is 4.80 in water (1194 Pa) and the fan outlet velocity is 2,800 fpm (14.2 m/s). What is the fan total pressure?**

- A. 4.80 in of water (1194 Pa)
- B. 5.29 in of water (1316 Pa)
- C. 5.50 in of water (1369 Pa)

Content Area: 2

Task: H

Level: Application

Answer: B

**5. Which of the following times is BEST for scheduling a final site review for a new office building?**

- A. prior to beneficial occupancy
- B. at equipment manufacturer startup
- C. just prior to ceiling installation

Content Area: 3

Task: H

Level: Recall

Answer: A

**6. Which of the following factors should an HVAC designer convey to the electrical designer for a chilled water pump?**

- A. chilled water flow rate and pump head
- B. voltage, power, and amperes
- C. maximum circuit amps (MCA) and maximum overcurrent protection (MOCP)

Content Area: 4

Task: N

Level: Recall

Answer: B