

Name (Print) \_\_\_\_\_ Department \_\_\_\_\_

**Chemistry 685-Safety Seminar  
Laboratory Fume Hood Operation  
January 18, 2001**

**Circle the ONE Correct Answer For Each Question**

- 1) When should a chemical fume hood be used?
  - a. When generating toxic vapors or fumes
  - b. When generating flammable vapors or fumes
  - c. When generating corrosive vapors or fumes
  - d. All of the above
  
- 2) How far back (from the sash) should chemicals and equipment be in the hood?
  - a. Depends on the width of the hood
  - b. The square root of the width of the hood
  - c. 6 to 10 inches (15 to 25 centimeters)
  - d. 1 to 2 feet
  
- 3) The most common method for using a chemical fume hood **incorrectly** is to:
  - a. Use the hood with the lab windows open
  - b. Having the sash in the extreme "open" (up) position
  - c. Having the sash closed (down)
  - d. Using the hood with the lights off
  
- 4) Fume hoods should not be used as chemical storage devices because:
  - a. It is expensive
  - b. Too much storage can restrict air flow
  - c. Close, random storage can lead to incompatibility problems
  - d. All of the above

**(OVER)**

- 5) If your sash is damaged or cracked, you should:
- Report it to your safety person or your supervisor
  - Report it to Brit Kirwan, OSU's president
  - Report it to the Columbus Dispatch or the Lantern
  - None of the above
- 6) When can the sash glass be all the way up in the "open" position?
- During the experiment setup or tear-down
  - Never
  - When there is no hazard present
  - "a." and "c."
  - None of the above
- 7) The Laboratory door should be closed during an experiment because:
- It maintains the lab at a negative air pressure (slight vacuum)
  - It minimizes foot traffic and, therefore, air turbulence
  - It contains any fires or explosions and minimizes the chance for spreading
  - All of the above
- 8) According to the Chemical Hygiene Plan, a fume hood should be inspected by the user:
- Every month
  - Every week
  - Daily (before each use)
  - Only after you suspect that the fan is no longer working correctly
- 9) Some general methods to ensure that the hood is working correctly include:
- Ribbon or tissue attached to the sash
  - Flow meter and alarm (static pressure gauge)
  - Smoke candles
  - All of the above
- 10) Out of the work practices listed below, which is the "**safe**" practice:
- Work with the sash in the open (up) position
  - Use the hood as a chemical disposal facility
  - Work with elevated equipment and as far back in the hood as possible
  - Use the hood as a chemical storage device
- 11) Out of the work practices listed below, which is the "**unsafe**" practice
- Work with the sash in the open (up) position
  - Chemicals stored to the side, not blocking more than 25% of the slots
  - Work with elevated equipment and as far back in the hood as possible
  - Work with the laboratory door closed