22 WELDING AND CUTTING

QUIZ 1 (15 POINTS TOTAL)

True/False (4 points)

- 1. The inhalation of tin oxide dust over a long period of time is considered to be disabling.
 - a. true
 - b. false
- 2. Inhalation of beryllium dust or fumes may result in an acute or chronic systemic disease.
 - a. true
 - b. false
- 3. Red is the generally recognized color for the oxygen hose.
 - a. true
 - b. false
- 4. In gas-tungsten arc welding, the electrode does not melt and is not used for filler metal.
 - a. true
 - b. false

Multiple Choice (3 points)

- 5. What kind of personal protective equipment do welders need when they are chipping?
 - a. safety glasses
 - b. leather apron
 - c. safety shoes
 - d. hearing protection
- 6. What flame temperature can acetylene produce?
 - a. 6,000 F
 - b. 3,000 F
 - c. 1,000 F
 - d. 800 F
- 7. What is the generally recognized color for inert gas and air hoses?
 - a. red
 - b. green
 - c. blue
 - d. black

Short Answer (6 points)

8. What types of safety hazards are associated with welding?

9. What gas, burned with oxygen, can produce a higher flame temperature than any other gas used commercially?

10. What kind of piping should be used for acetylene distribution systems?

11. What steps have been taken to guard against inadvertently switching oxygen and acetylene pressure regulators?

12. How should a gas hose be tested for leaks?

13. What are torches usually constructed of?

Short Essay (2 points)

14. What two practices are sometimes used if containers that held flammable liquids or other combustibles cannot be removed for standard cleaning procedures?

15. What is resistance welding?

QUIZ 2 (13 POINTS TOTAL)

True/False (2 points)

- 1. Chronic exposure to manganese fumes will cause tiredness, uncontrollable laughter, and other nervous system effects.
 - a. true
 - b. false
- 2. Natural and mechanical ventilation are generally not adequate to reduce levels of airborne contaminants to acceptable levels.
 - a. true
 - b. false

Multiple Choice (5 points)

- 3. Which of the following is not considered a primary pulmonary gas?
 - a. ozone
 - b. carbon monoxide
 - c. phosgene
 - d. oxides of nitrogen
- 4. Which of the following effects may be produced by exposure to various toxic gases and vapors generated during welding?
 - a. pulmonary edema
 - b. asphyxiation
 - c. chronic bronchitis
 - d. all of the above

- 5. Which form of mechanical ventilation is preferred?
 - a. local exhaust
 - b. local forced
 - c. general area mechanical air movement
 - d. none of the above
- 6. How should air flow be directed for the most effective fume removal?
 - a. from behind the welder
 - b. from above
 - c. across the face
 - d. from below
- 7. What organization has set up standards for training and qualification of welders?
 - a. American Society of Mechanical Engineers
 - b. American Welding Society
 - c. American Conference of Governmental Industrial Hygienists
 - d. OSHA

Short Answer (5 points)

8. What health effects may result from the presence of cadmium?

9. What is local exhaust ventilation?

10. What is the most significant health hazard in the welding process?

11. How should gas cylinders be stored?

12. What four types of benign pneumoconiosis are associated with welding?

Short Essay (1 point)

13. What precautions should be taken when it is necessary to weld or cut close to wood construction or combustible material that cannot be removed or protected?