## **General Review**

## Fires, Firefighting, and Explosions

- 1. Explosions in coal mines are most often caused by ignitions of:
  - a. Carbon monoxide
  - b. Hydrogen
  - c. Methane
  - d. Sulfur dioxide
- 2. The first indications that an explosion has occurred are often very similar to those of:
  - a. An inundation of water
  - b. A large roof fall
  - c. A fan stoppages
  - d. All of the above
- 3. A positive indication that a fire exists in a mine is:
  - a. Carbon monoxide and/or smoke in the return airways
  - b. Methane and carbon dioxide in the return airways
  - c. Lowered oxygen content in the return airways
  - a. A disruption in normal ventilation
- 4. Burning materials that give off extremely toxic gases in addition to carbon monoxide are:
  - a. The coal seam itself
  - b. Hydraulic fluids
  - c. Neoprene and other synthetic rubber compounds
  - d. All of the above
- 5. The preferred type of hand-held extinguisher for teams is a dry chemical type that contains:
  - a. Sodium bicarbonate
  - b. Potassium chloride
  - c. Carbon tetrachloride
  - d. Monoammonium phosphate
- 6. A monoammonium phosphate extinguisher is effective in fighting:
  - a. Class A fires
  - b. Class B fires
  - c. Class C fires
  - d. All of the above

- 7. Foam generators are effective in controlling mine fires in that they:
  - a. Limit the amount of oxygen reaching the fire area
  - b. Cool the burning materials
  - c. Can be effective when set up long distances from the actual fire
  - d. All of the above
- 8. Seals in high volatile coal seams are often placed:
  - a. 10 feet from the fire area
  - b. 100 feet from the fire area
  - c. 1,000 feet or more from the fire area
  - d. 10,000 feet or more from the fire area
- 9. Probably the best material to use for sealing a mine fire is:
  - a. Brattice cloth
  - b. Cement blocks
  - c. Tile or bricks
  - d. Tongue-and-groove lumber
- 10. Non-metallic tubes or pipes are inserted in temporary and permanent seals for the purpose of:
  - a. Checking for smoke
  - b. Bleeding off excess pressure from the sealed area
  - c. Collecting air samples from the sealed area
  - d. Ventilating the sealed area

## General review answers: (pages5-56)

- 1. С
- 2. b 3. а
- 4. С
- 5. d
- 6. d
- 7. d
- 8. С
- 9.
- b 10. С