Written Examination Day 1 KMI

Team Number/Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contestant Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Gas layering is like smoke rollback with Methane and Hydrogen the likely

gases to \_\_\_\_\_\_\_\_\_ layers during a fire. (Donald W. Mitchell Mine Fires, p. 23)

1. \_\_\_ Create
2. \_\_\_ Form
3. \_\_\_ Build
4. Temporary seals should include \_\_\_\_\_\_\_\_\_ for collecting air samples from

within the sealed area. (MSHA 3028, pp. 5-24)

1. \_\_\_ Provisions
2. \_\_\_ Tubes
3. \_\_\_ Pipes
4. Nitrogen dioxide has a reddish-brown color in high \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

(MSHA 3028, pp. 2-18)

1. \_\_\_ Concentrations
2. \_\_\_ Amounts
3. \_\_\_ Liberations

4. Hydrogen sulfide is flammable and explosive in \_\_\_\_\_\_\_\_\_\_\_\_ from 4.3 to 45.5 percent in normal air. (MSHA 3028, pp. 2-20)

1. \_\_\_ Concentrations
2. \_\_\_ Amounts
3. \_\_\_ Liberations
4. \_\_\_\_\_\_\_\_ 21 percent of normal air is oxygen. (MSHA 3028, pp. 2-11)
5. \_\_\_ About
6. \_\_\_ Around
7. \_\_\_ Approximately
8. A mixture of coal dust in air reduces the explosive \_\_\_\_\_\_\_ of methane. (MSHA 2102, p. 32)
9. \_\_\_ Limit
10. \_\_\_ Range
11. \_\_\_ Amount
12. One \_\_\_\_\_\_\_\_\_\_ of heat during a fire is that it tends to weaken the roof, especially where head coal is left. (MSHA 2105, p. 32)
13. \_\_\_ Effect
14. \_\_\_ Problem
15. \_\_\_ Hazard
16. It is the responsibility of rescue team members to have all the \_\_\_\_\_\_\_\_\_\_\_

needed to do the work. (MSHA 2104, p. 23)

1. \_\_\_ Material
2. \_\_\_ Information
3. \_\_\_ Supplies
4. For teams using a compressed oxygen breathing apparatus, the captain

usually notes each team member’s gauge reading at each \_\_\_\_\_\_\_ stop and

reports the lowest reading to the fresh-air base. (MSHA 2104, p. 32)

1. \_\_\_ Required
2. \_\_\_ Rest
3. \_\_\_ Team
4. Before using a hand \_\_\_\_\_\_\_\_\_ extinguisher it must be checked for the type of fire you are fighting. (MSHA 2105, p. 10)
5. \_\_\_ Fire
6. \_\_\_ Held
7. \_\_\_ Chemical

Written Examination Day 1 KMI Answer Key

1. B Form
2. A Provisions
3. A Concentrations
4. A Concentrations
5. A About
6. A Limit
7. C Hazard
8. B Information
9. B Rest
10. B Held