

BG4 Team Tech answers

- 1.C
- 2.D
- 3.B
- 4.A
- 5.C
- 6.D
- 7.B
- 8.B
- 9.D
- 10.A

11. MSHA requires mine rescue stations serving underground M/NM mines to measure concentrations for carbon monoxide from _____.

- A. 0% to 100%
- B. 0% to 20%
- C. 0 ppm to 9,999 ppm (answer on page 2-3, 5th paragraph)
- D. 0ppm to 999 ppm

12. The presence of small quantities of hydrogen _____ the explosive range of other gases.

- A. Slightly increases
- B. Slightly decreases
- C. Greatly increases (answer on page 2-18, last paragraph)
- D. Greatly decreases

13. It is more difficult for concentrations of explosive gases to build up when the barometric pressure is high.

- A. True
- B. False (answer on page 2-6)

14. Firefighting with water or foam cannot produce hydrogen.

- A. True
- B. False (answer on page 2-19, Meanings of Findings states it can)

15. The explosive range of propane is _____.
- A. 0.01% to 9.85%
 - B. 1.75% to 9.15%
 - C. 1.97% to 10.68%
 - D. 2.12 % to 9.35% (answer on page 2-23, under explosive range and flammability)

From MSHA Publication 3027 Module 3 Ventilation

16. Porous stoppings such as concrete block stoppings are usually plastered _____ to reduce air leakage.
- A. Low-pressure side
 - B. High-pressure side (answer on page 3-8, 5th paragraph)
 - C. Both sides
 - D. None of the above
17. A medium-velocity (or regular) anemometer measures velocities from _____ to _____ feet per minute.
- A. 100, 2500
 - B. 200, 3,000
 - C. 500, 5,000
 - D. None of the above (answer is on page 3-16, anemometers)
18. An anemometer measures feet of travel and requires timing- usually one minute- to determine velocity in feet per minute.
- A. True
 - B. False (answer on page 3-16, measures linear feet of travel)
19. A pilot tube is used to measure high velocities encountered in in flowing ducts and tubing where measurements with an anemometer are difficult.
- A. True
 - B. False (answer on page 3-16, pitot tube)
20. If pressure difference exists naturally between two airways, then the mine has mechanical ventilation.
- A. True
 - B. False (3-5, 2nd paragraph, natural ventilation)
21. Oxygen enriched atmospheres may cause combustible gas readings to be higher than actual concentrations?
- A. True (Page 3 MX6 manual rev4, iTX manual page 3)
 - B. False
22. If there is an oxygen sensor installed in the iTX or MX6, is it calibrated during the zeroing operation?

- A. True (Page 18 MX6 manual rev 4, iTX manual page 9)
- B. False

23. The iTX and MX6, battery display is in the upper right hand corner of the display.

- A. True
- B. False (Page 11 MX6 manual rev 4, iTX manual, page 8)

24. During calibration of the iTX or MX6, what is the recommended flow rate?

- A. 0.5 LPM (Page 19 MX6 manual rev 4, iTX manual page 24)
- B. 1.5 LPM
- C. 2.0 LPM
- D. none of the above

25. Industrial Scientific recommends that a full instrument calibration be performed _____.

- A. Daily
- B. Weekly
- C. Monthly (Page 16 MX6 manual rev 4, iTX manual page 23)
- D. None of the above

26. When using the iTX or MX6 silica compound vapors can affect the combustible gas sensor and may cause readings of combustible gas to be higher than actual gas concentrations.

- A. True (Page 3 MX6 manual rev 4, iTX manual page 3)
- B. False

27. The calibration of the combustible gas sensor in the iTX or MX6 should not be verified after any incident where the combustible gas content has caused the instrument to display an over range condition.

- A. True
- B. False (Page 3 MX6 manual rev 3, iTX manual page 3)

28. Sudden changes in atmospheric pressures in the iTX and MX6 will not cause temporary fluctuations in the oxygen reading.

- A. True
- B. False (Page 3 MX6 manual rev 3, iTX manual page 3)

29. The manufacturer recommends that a functional (Bump) test be performed on every instrument before each days use.

- A. True (Page 3 MX6 manual rev 4, iTX manual page 23)
- B. False

30. The iTX and MX6 does not use rechargeable battery packs P/N 1301-1864 and P/N 1781-4568.

- A. True (Page 5 MX6 manual rev 4, iTX manual page 4)

B. False