

**2019 Southern Regional Mine Rescue Contest  
New Iberia, LA  
Written Test – Team Trainer Competition**

Name \_\_\_\_\_ Company \_\_\_\_\_

Team Name \_\_\_\_\_ Contest Position No. \_\_\_\_\_

Team Member No. \_\_\_\_\_

**Directions: Use answer sheet & fill in completely.**

Q#1) A mine ventilation system is designed to:

- A) Supply Oxygen;
- B) Bring in fresh air;
- C) Remove harmful gases;
- D) All of the above.

Q#2) The rescue team stationed at the fresh air base is considered the:

- A) Standby Team
- B) Backup Team
- C) Reserve Team
- D) Working Team

Q#3) Temporary bulkheads built in a passageway should be placed at least 4 to 6 feet into the passageway in order that:

- A) It will not be affected by fire;
- B) Provide a rest area for the team;
- C) Sufficient space is available to construct a permanent bulkhead;
- D) It will not be affected by a fire.

Q#4) The base of operations from which rescue and recovery work advances into irrespirable atmospheres is called the \_\_\_\_\_.

- A) Triage Area;
- B) Command Center;
- C) Fresh air base;
- D) Benching area.

Q#5) The three sides of the fire triangle are fuel, oxygen and \_\_\_\_\_.

- A) Chemical reaction;
- B) Heat;
- C) Explosive gases;
- D) Current.

- Q#6) Preconditions for unsealing a fire area include:
- A) Area behind seal has had sufficient cooling time;
  - B) Oxygen content behind seal low enough to make a explosion impossible;
  - C) Carbon monoxide not present behind seal;
  - D) All of the above.
- Q#7) The best definition of the term “stressor” is anything that:
- A) Causes significant behavioral changes;
  - B) Puts pressure on the body;
  - C) Consumes the attention of the person experiencing stress;
  - D) Causes wear and tear on the body’s resources.
- Q#8) The recovery position is also known as the \_\_\_ position.
- A) Lateral;
  - B) Stroke;
  - C) Lateral recumbent
  - D) Superior.
- Q#9) What can be assessed by watching and feeling the chest and abdomen move during breathing?
- A) Skin signs;
  - B) Pulse rate;
  - C) Respiratory rate;
  - D) Blood pressure.
- Q#10) A patient who presents with normal vital signs and show no indications of a life-threatening problem may be described as:
- A) Routine;
  - B) Unstable;
  - C) Stable;
  - D) Normal.
- Q#11) Which one of the following is NOT a typical characteristic of arterial bleeding?
- A) The color of the blood is bright red;
  - B) Blood loss is often profuse in a short period of time;
  - C) Blood flows steadily from the wound;
  - D) Blood spurts from the wound.
- Q#12) Why does a patient’s pulse rate increase as shock develops?
- A) To create more blood to compensate for fluid loss;
  - B) To force oxygenated blood out of the patient’s body core;
  - C) To maintain adequate perfusion;
  - D) To counteract the high blood pressure.

Q#13) Underground mines that have not been approved for alternative mine rescue capability must establish at least \_\_\_\_\_ mine rescue teams which are available at all times when miners are underground,

- A) One;
- B) Two;
- C) Three
- D) Four.

Q#14) How many extra fully charged oxygen bottles are required for every six apparatus?

- A) One;
- B) Two;
- C) Three;
- D) Four.

Q#15) MSHA Form 5000-3 must be kept on file for a period of:

- A) For the full time the member is on the team;
- B) Two years;
- C) One year;
- D) None of the above.

Q#16) A record of correction action (breathing apparatus) shall be maintained at the mine rescue station for a period of \_\_\_\_\_ year(s)?

- A) One;
- B) Two;
- C) Three;
- D) Four.

Q#17) Mine rescue team communication systems must be at least \_\_\_\_\_ feet in length.

- A) 2,000;
- B) 1,000;
- C) 1,300;
- D) 1,800.

Q#18) A mine rescue team member will be ineligible to serve on a team if more than \_\_\_\_\_ of training is missed during one year.

- A) 24 Hours;
- B) 16 Hours;
- C) 8 Hours;
- D) One Day.

Q#19) Any team whose member(s) intentionally disturb or destroy any component on a competition field will immediately be assessed a \_\_\_\_\_ point discount.

- A) 10
- B) 50
- C) 100
- D) 200

Q#20) The Number 1 judge must:

- A) Have current Mine Rescue Judges training;
- B) Have been briefed on the particular problem;
- C) Be a MSHA employee.
- D) All of the above.

Q#21) When using the standard horn blasts or other audible signals between team members, 3 blasts on the horn means:

- A) Distress;
- B) Advance;
- C) Stop;
- D) Retreat.

Q#22) The procedure for team checks shall be followed at not more than \_\_\_\_\_ minute intervals.

- A) Thirty;
- B) Ten;
- C) Twenty;
- D) Twenty five.

Q#23) During the first aid competition, not checking the accident scene to ensure personal safety will receive \_\_\_\_\_ discounts per infraction.

- A) 20;
- B) 10;
- C) 5;
- D) 0 (none).

Q#24) An excavation in the shaft or mine made below the mining level to collect water is called a:

- A) Stopping;
- B) Undercast;
- C) Sump;
- D) Winze.

Q#25) All sensors on a MX6:

- A) Will last indefinitely;
- B) Should be replaced after every use;
- C) Do not need calibration once in instrument;
- D) Gradually degrade over time.

Q#26) MSHA's approval/certification for the use of the MX6 is under CFR30, \_\_\_\_\_.

- A) Part 62;
- B) Part 58;
- C) Part 46;
- D) Part 22.

Q#27) The MX6 High-level audio gas alarm is a:

- A) Low frequency beeps with a long delay;
- B) Continuous claxon;
- C) High frequency with short delays;
- D) Vibration only.

Q#28) As part of the Technician team apparatus checks, \_\_\_ discounts will be assessed for each deficiency not found.

- A) 1
- B) 5
- C) 10
- D) 15

Q#29) As part of the Technician team apparatus checks, \_\_\_ discounts will be assessed for each monthly check not performed.

- A) 15
- B) 10
- C) 5
- D) 3

Q#30) To work the apparatus problem, the technician team will be provided by the judge:

- A) Testing equipment;
- B) Tools;
- C) Apparatus;
- D) All of the above.

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- A#1) D) Module 2; Page 3; Paragraph 1.
- A#2) B) Module 1; Page 14; Paragraph 1.
- A#3) C) Module 3; Page 22; Paragraph 1.
- A#4) C) Module 4; Page 6; Paragraph 7
- A#5) B) Module 5; Page 4; Paragraph 4
- A#6) D) Module 7; Page 17; Visual 2
- A#7) D) Brady 10<sup>th</sup> Ed., Chapter 3, Page 46
- A#8) C) Brady 10<sup>th</sup> Ed., Chapter 4, Page 57
- A#9) C) Brady 10<sup>th</sup> Ed., Chapter 12, Page 224
- A#10) C) Brady 10<sup>th</sup> Ed., Chapter 13, Page 243
- A#11) C) Brady 10<sup>th</sup> Ed., Chapter 18, Page 358
- A#12) C) Brady 10<sup>th</sup> Ed., Chapter 19, Page 395
- A#13) B) Part 49.2(a)(1)
- A#14) B) Part 49.6(a)(3)
- A#15) B) Part 49.7(c).
- A#16) A) Part 49.6(b)(3)
- A#17) B) Part 49.8(a)(8)(ii)
- A#18) C) Part 49.8(c)
- A#19) C) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 5; Rule #12
- A#20) D) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 19; Paragraph 4
- A#21) D) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 25; Paragraph 2
- A#22) C) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 27; Paragraph 5
- A#23) C) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 101; A-1
- A#24) C) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 110; Sump definition
- A#25) D) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.11; Last Paragraph
- A#26) D) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.2; MSHA.
- A#27) C) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.6; Audio Indicator.
- A#28) D) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 72; Rule #8.
- A#29) C) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 73; Rule #10.
- A#30) D) 2019 – 2020 Metal and Nonmetal Mine Rescue Contest Rules Page 72; Rule #2.