

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

Name _____ Company _____

Team Name _____ Contest Position No. _____

Team Member No. _____

Directions: Use answer sheet & fill in completely.

Q#1) The location where teams enter into the mine's irrespirable atmosphere is considered the:

- A) Fresh Air Base;
- B) Command Center;
- C) Bench Area;
- D) Triage Area.

Q#2) Section 7(3) of the MINER Act of 2006 requires that the primary communicator with the operator, miner's families, the press and the public be:

- A) Mine Manager
- B) MSHA;
- C) Mine HR Manager;
- D) Company person picked by the company.

Q#3) MSHA will arrive at the mine site to:


- A) Advise with company personnel on how the operation might be best carried out;
- B) Take charge of an operation is deemed necessary.
- C) Both A & B;
- D) Neither A or B.

Q#4) If required for the event a _____ should be established to set a clear order of team usage during the operation.

- A) Notification plan;
- B) Command center;
- C) Rotation schedule;
- D) Bench area.

Q#5) In some large multi-levels mines, a _____ fan is used to help maintain the correct ventilation.

- A) Booster;
- B) Blower;
- C) Exhaust;
- D) Auxiliary.

- Q#6) On a mine map the symbol _____ represents?
- A) Track;
 - B) Temporary bulkhead or stopping;
 - C) Permanent bulkhead or stopping;
 - D) Conveyor belt.
- Q#7) On a mine map the symbol  represents?
- A) Auxiliary fan and tubing;
 - B) Undercast
 - C) Man Door;
 - D) Main Fan.
- Q#8) Barefaced exploration should stop when:
- A) There is sufficient oxygen;
 - B) They encounter smoke or damage;
 - C) The ventilation system is working properly;
 - D) All of the above.
- Q#9) When determining the rate of travel, the team captain should consider:
- A) The surrounding conditions;
 - B) The team's condition;
 - C) The equipment being carried;
 - D) All of the above.
- Q#10) The team stationed at the fresh air base ready to go is considered the:
- A) Standby team;
 - B) Bench Team;
 - C) Briefing Team;
 - D) Backup Team.
- Q#11) If a team member experiences problems their apparatus beyond the fresh air base the team member should;
- A) Switch to the extra apparatus that the team carried with them;
 - B) Be immediately sent back to the fresh air base;
 - C) With the entire team, return immediately to the fresh air base;
 - D) Be sent back to the fresh air base with another team member.
- Q#12) Water is best used on what type of fire:
- A) Class D;
 - B) Class C;
 - C) Class B;
 - D) Class A.

Q#13) Class B fires involve:

- A) Combustible metals;
- B) Combustible liquids;
- C) Electric equipment;
- D) Combustible materials.

Q#14) When fighting an obstacle fire with burning equipment at its center and using a fire extinguisher, it is best to:

- A) Use a 2-man team and approach from each side;
- B) Aim directly at the burning equipment;
- C) Use a 2-man team and approach from the same side;
- D) Use a 2-man team- 1st man actively fighting the fire, the 2nd man watching for the fire reigniting.

Q#15) When survivors are found, their behavior may range from apprehension to uncontrollable hysteria is considered a:

- A) Physic Factor;
- B) Psychological Factor;
- C) Conditional Factor;
- D) Physical Factor.

Q#16) Triage is a system of assigning priorities to:

- A) Recovery of the mine;
- B) Re-establishing the ventilation system;
- C) Where mine entry will occur;
- D) Medical treatment of injured miners.

Q#17) The safest way for getting survivors out of a refuge chamber is to:

- A) Tear down the barricade to quickly access area;
- B) Quickly open the door & move team in;
- C) Advance fresh air to the area;
- D) All of the above.

Q#18) If survivors are found in questionable air and is able to walk, the team should;

- A) Place him on a stretcher & transport him to the fresh air base;
- B) Give him breathing protection and allow him to walk to the fresh air base while the team continues to explore;
- C) Give him breathing protection tell him you will be back for him as soon as possible;
- D) Give him breathing protection, position him between members of the team to be walked to the fresh air base.

- Q#19) During recovery operations air locking at a sealed fire should always begin:
- A) On the exhaust side of the fire;
 - B) On the intake side of the fire;
 - C) At the fresh air base;
 - D) All of the above.
- Q#20) The affected area is recovered and re-ventilated as a whole is called:
- A) Direct ventilation
 - B) Progressive ventilation;
 - C) Regressive ventilation;
 - D) Proposed ventilation.
- Q#21) To determine the rate of diffusion of a gas the team needs to know:
- A) Atmospheric pressure;
 - B) Temperature
 - C) Air current;
 - D) All of the above.
- Q#22) Physical properties of a gas can help identify it. A reddish-brown color could indicate:
- A) Carbon monoxide;
 - B) Hydrogen sulfide;
 - C) Nitrogen oxides;
 - D) Oxygen.
- Q#23) A gas that can cause harm by either breathing it or by coming in contact with it is considered to be:
- A) Flammable;
 - B) Asphyxiating;
 - C) Toxic;
 - D) Soluble.
- Q#24) How does an asphyxiating gas produce an oxygen-deficient atmosphere:
- A) By destroying oxygen;
 - B) By combining with oxygen;
 - C) By displacing oxygen;
 - D) By liquefying oxygen.
- Q#25) Breathing air with 5 percent (%) Carbon dioxide can cause:
- A) Death;
 - B) No effect;
 - C) Violent panting;
 - D) Difficult breathing.

Q#26) Oxides of Nitrogen are:

- A) Explosive;
- B) Toxic;
- C) Flammable;
- D) All of the above.

Q#27) Hydrogen sulfide is:

- A) Flammable;
- B) Toxic;
- C) Explosive;
- D) All of the above.

Q#28) When pumping or walking through water, concentrations of the following gases could increase:

- A) Sulfur Dioxide;
- B) Carbon Monoxide;
- C) Hydrogen Sulfide;
- D) All of the above.

Q#29) If methane is present it's important to monitor it carefully do to its being:

- A) Toxic;
- B) Asphyxiating;
- C) Explosive;
- D) None of the above.

Q#30) To test for Methane, the detector should be held:

- A) Above the head;
- B) At eye level;
- C) At chest level;
- D) At your feet.

Southern Regional Mine Rescue Contest
New Iberia, LA
Written Test Answers – Field Competition

- A#1) A) Module 1; Page 14; Paragraph 5.
- A#2) B) Module 1; Page 5; Paragraph 4.
- A#3) C) Module 1; Page 6; Paragraph 3.
- A#4) C) Module 1; Page 14; Paragraph 7.
- A#5) A) Module 3; Page 5; Paragraph 2.
- A#6) B) Module 3; Page 25; Sample Mine Map symbols.
- A#7) D) Module 3; Page 25; Sample Mine Map symbols.
- A#8) B) Module 4; Page 6; Paragraph 5.
- A#9) D) Module 4; Page 25; Paragraph 1&2
- A#10) D) Module 4; Page 53; Paragraph 2
- A#11) C) Module 4; Page 32; Paragraph 1
- A#12) D) Module 5; Page 5; Paragraph 4
- A#13) B) Module 5; Page 5; Paragraph 5
- A#14) A) Module 5; Page 7; Paragraph 8
- A#15) B) Module 6; Page 8; Paragraph 1
- A#16) D) Module 6; Page 14; Paragraph 10
- A#17) C) Module 6; Page 4; Paragraph 6
- A#18) D) Module 6; Page 7; Paragraph 5
- A#19) B) Module 7; Page 8; Paragraph 4
- A#20) A) Module 7; Page 9; Paragraph 5
- A#21) D) Module 2; Page 5; Paragraph 5.
- A#22) C) Module 2; Page 8; Paragraph 2.
- A#23) C) Module 2; Page 9; Paragraph 1.
- A#24) C) Module 2; Page 11; Q-7.
- A#25) D) Module 2; Page 15; Paragraph 8-Health Hazards.
- A#26) B) Module 2; Page 17; Paragraph 4&5.
- A#27) D) Module 2; Page 19; Paragraph 11 & 12.
- A#28) B) Module 2; Page 20; Paragraph 6-Where found.
- A#29) C) Module 2; Page 23; Paragraph 2-Meaning of findings.
- A#30) B) Module 2; Page 22; Paragraph 9-Where found.