Q#1) The gases present in a mine following a disaster will vary according to:
   A) The type of equipment;
   B) The disaster situation;
   C) The type of mine;
   D) All of the above.

Q#2) For the Bio 240 S proper facepiece fit is critical in maintaining the ______ pressure seal.
   A) High;
   B) Low;
   C) Positive;
   D) Negative.

Q#3) A medium-velocity anemometer for measuring velocities from 120 to 2,000 feet per minute is also referred to as:
   A) Common anemometer;
   B) Standard anemometer;
   C) Regular anemometer;
   D) None of the above.

Q#4) To avoid carbon dioxide poisoning, it is suggested that the user exits the contaminated area after an elapsed time of 4 hours since the Bio 240 S DOES NOT give any indication of:
   A) Remaining oxygen levels;
   B) Remaining carbon dioxide absorbent;
   C) Neither of the above;
   D) Both of the above.

Q#5) On the Bio 240 S the oxygen cylinder sealing washer serves the same purpose as an o-ring seal and should:
   A) Be lubricated with Cristo-Lube;
   B) Be lubricated with Dow-111 Silicone lubricant;
   C) Never be lubricated;
   D) Be lubricated with an oil-based lubricant.
Q#6) The Operation-mode root menu for the MX6 has the following menu tabs, EXCEPT:
   A) Sensor;
   B) View;
   C) Bump test;
   D) Data.

Q#7) During the Bio 240 S flow test, when the oxygen valve is opened the flow reading should be at least ____ lpm with the oxygen cylinder at 3000 psig.
   A) 1.0
   B) 1.3
   C) 1.6
   D) 1.5

Q#8) After all the sensors installed in the MX6 have been bump tested the user must acknowledge this screen to continue, by selecting the ___ button.
   A) “Cancel”
   B) “OK”
   C) “Abort”
   D) Any

Q#9) A device used to control and adjust the quantity of airflow in a mine is called a:
   A) Bulkhead;
   B) Line Brattice;
   C) Regulator;
   D) Auxiliary fan.

Q#10) Before removing the oxygen cylinder:
   A) Depress the bypass valve to relieve any internal pressure;
   B) Verify the cylinder valve is closed;
   C) Verify the chest mounted pressure gauge reads 0 psi;
   D) All of the above.

Q#11) In order for a flammable gas to explode, there must be:
   A) A source of ignition;
   B) Enough oxygen;
   C) Enough of the gas in the air;
   D) All of the above.

Q#12) A mechanical ventilator installed at the surface which operates by either exhausting or pushing to induce airflow through the mine is considered to be a:
   A) Booster fan;
   B) Auxiliary fan;
   C) Radiator fan;
   D) Main fan.
Q#13) The ______ pressure will insure that the entire breathing loop of the respirator is greater than the external ambient pressure.

A) Positive;
B) Negative;
C) High;
D) Low.

Q#14) On the MX6 the High-level visual alarm is:

A) No change in LEDs;
B) LEDs are pulsed with a long delay;
C) LEDs are pulsed with a short delay;
D) None of the above.

Q#15) Each toxic gas has a TLV, which stands for:

A) The Level Varies;
B) Threshold Limit Value;
C) Toxic Limit Value;
D) Threshold Line Varies.

Q#16) It is normal for the pressure gauge of the harness to:

A) Immediately read full pressure;
B) Take up to 30 seconds to read full pressure;
C) Take up to 90 seconds to read full pressure;
D) Take up to 1 minute to read full pressure.

Q#17) During the MX6 zeroing operation the following sensor is calibrated:

A) Oxygen;
B) Nitrates of Oxygen;
C) Carbon Monoxide;
D) Carbon Dioxide.

Q#18) To perform a positive pressure check on the Bio 240 S facepiece the ______port/s should be blocked.

A) Red;
B) Green;
C) Both;
D) Neither.

Q#19) 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#20) Temporary bulkheads built in a passageway should be placed at least 4 to 6 feet into the passageway in order that:

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

Q#21) The Biopak 240 S closed circuit system differs from an open circuit system because of:

A) All breathing air is vented to atmosphere;
B) All breathing air is recycled and confined within the device;
C) All breathing air is recycled then vented to the atmosphere;
D) None of the above.

Q#22) When bump testing the MX6, once a sensor has passed the test, the word “Pass is displayed for:

A) 3 seconds;
B) 5 seconds;
C) 8 seconds;
D) 10 seconds.

Q#23) If the barometric pressure falls, a gas will:

A) Expand;
B) Concentrate;
C) Doesn’t matter;
D) Not change.

Q#24) The MX6 Low-level audio gas alarm is a:

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

Q#25) Collapsible tubing for auxiliary fans should be used for:

A) Forcing systems;
B) Exhausting systems;
C) Neither of the above;
D) Both of the above.
Q#26) The calibration complete screen could show what results for each sensor once the calibration is finished?
   A) Failed;
   B) Marginal;
   C) Passed;
   D) Any of the above.

Q#27) Maintenance to the breathing chamber assembly may involve:
   A) Replacement of the flow restrictor;
   B) Replacement of the demand valve;
   C) Replacement of the diaphragm;
   D) Any of the above.

Q#28) Prior to each day's use the MX6 should:
   A) Have a bump test performed;
   B) Be calibrated;
   C) Be serviced;
   D) Have sensor's replaced.

Q#29) Light gases such as Hydrogen will:
   A) Not diffuse rapidly;
   B) Be fairly easy to disperse;
   C) Not disperse easily;
   D) Be hard to remove.

Q#30) On the MX6 gas-monitoring display screen in numeric format, each sensor will display its reading in the following order:
   A) Gas concentration; Unit of measure; Sensor type.
   B) Sensor Type; Gas concentration; Unit of measure.
   C) Sensor type; Unit of measure; Gas concentration.
   D) Depends on the type of sensor.
A#1) D) Module 2; Page 12; Paragraph 7.
A#2) C) Bio 240S Benchman Instruction Manual Rev L; Pg. 9 Facepiece Section.
A#3) C) Module 3; Page 16; Paragraph 7.
A#4) B) Bio 240S User Instruction Manual Rev F; Pg. 11 Item #10 & Warning
A#5) C) Bio 240S Benchman Instruction Manual Rev L; Pg. 23 2nd Warning.
A#6) C) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.21; Paragraph #2
A#7) C) Bio 240S Benchman Instruction Manual Rev L; Pg. 16 Section G-3.
A#8) B) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.38; Paragraph #5.
A#9) C) Module 3; Page 14; Paragraph 7.
A#10) D) Bio 240S Benchman Instruction Manual Rev L; Pg. 13 1st Warning
A#11) D) Module 2; Page 7; Paragraph 5.
A#12) D) Module 3; Page 54; Paragraph 4.
A#13) A) Bio 240S Benchman Instruction Manual Rev L; Pg. 7 5th paragraph
A#15) B) Module 2; Page 9; Paragraph 4
A#16) C) Bio 240S User Instruction Manual Rev F; Pg. 8 Item #14.
A#17) A) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.36; 6th Paragraph
A#18) A) Bio 240S User Instruction Manual Rev F; Pg. 7 Item 11.
A#19) D) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.2; MSHA.
A#20) D) Module 3; Page 22; Paragraph 1.
A#21) B) Bio 240S Benchman Instruction Manual Rev L; Pg. 7 1st paragraph.
A#22) A) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.38; Paragraph #4.
A#23) A) Module 2; Page 6; Paragraph 2.
A#24) C) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.6; Audio Indicator.
A#25) A) Module 3; Page 10; Paragraph 8
A#27) D) Bio 240S Benchman Instruction Manual Rev L; Pg. 28 Breathing Chamber Assembly.
A#28) A) MX6 iBird Op’s Guide (ED 17; Aug 10, 2018) Pg.3; last Warning.
A#29) B) Module 2; Page 7; Paragraph 2.