



BioPak 240 Revolution

BioPak 240 R User's Quiz

Instructions

Circle the correct letter or answer that represents the **BEST** answer. If you make a correction make sure all erasures are complete. Each question is worth 2.5 points for a total of 100 points. You have 30 minutes to complete this quiz. Please print your name and date clearly in the space below:

Name:

Date:

Part 1, Multiple Choice

Circle the correct letter. Circle only one letter for each question.

1. The BioPak 240 Revolution is:
 - A. A positive pressure SCBA
 - B. A negative pressure SCBA
 - C. A decreased flow system
 - D. An open circuit SCBA
2. The rated duration (use) time for the BioPak 240 Revolution is:
 - A. 4 hours
 - B. 3 hours
 - C. 2 hours
 - D. 1 hour
3. The two most plentiful gases in air are:
 - A. Oxygen and Carbon Dioxide
 - B. Oxygen and Argon
 - C. Krypton and Xenon
 - D. Oxygen and Nitrogen
4. If you hear the Demand Valve hit every time you inhale, and you are not working hard, you should:
 - A. Use the Emergency By-Pass Valve
 - B. Breathe slower
 - C. Turn off the oxygen cylinder
 - D. Check your facemask fit and adjust it for a better seal

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5. The purpose of the BioPak 240 Revolution's Solid Scrubber canister is to remove:
 - A. Carbon Dioxide
 - B. Carbon Monoxide
 - C. Oxygen
 - D. Water Vapor

6. When the alarm sounds on the BioPak 240 Revolution, approximately how much breathing time is left?
 - A. 2 hours
 - B. 1 hour
 - C. 5-6 minutes
 - D. 10-12 seconds

7. Checking the SCBA facemask and adapter, CO2 absorbent, ice canisters, cylinder pressure, and the alarm & battery check is performed by the _____.
 - A. User and done every 30 days
 - B. Benchman and done quarterly
 - C. User and done after turn-around maintenance
 - D. User and done every time the SCBA is placed into service

8. When the pressure gauge on the BioPak 240 is reading 3000 PSI you have about how many hours of breathing time left?
 - A. 1 hour
 - B. 2 hours
 - C. 3 hours
 - D. 4 hours

9. In a positive pressure respirator the facepiece pressure is:
 - A. Maintained below the pressure outside of the facepiece
 - B. Maintained above the pressure outside of the facepiece
 - C. Maintained the same as the pressure outside of the facepiece
 - D. Negative compared to the pressure in the lungs

10. Which of the following are warning symptoms that require immediate attention such as leaving the hazardous area:
 - A. Nausea, dizziness or illness
 - B. Severed pressure gauge line
 - C. Difficulty inhaling or exhaling
 - D. Over actuation of the demand valve
 - E. All of the above

11. The Emergency By-Pass is located:
 - A. Behind the oxygen cylinder ON/OFF knob
 - B. Near the pressure gauge
 - C. On the top of the unit
 - D. On the facepiece

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12. Reduced duration (less than 4 hours) in the BioPak 240 may be caused by:
- A. Leaks in the BioPak 240 breathing loop
 - B. Poor facemask seal, or beards and eyeglasses that break the facemask seal.
 - C. Excessive use of the emergency bypass valve
 - D. All of the above
13. To use the Emergency By-Pass you should:
- A. Push the button in until you hear a hissing sound
 - B. Push the button in for 20 seconds
 - C. Push the button in for 10 seconds
 - D. Push the button in for 2 seconds
14. When the bottle pressure reaches approximately 25% of its capacity, the audible and visual alarm will activate. Which best describes the alarm:
- A. 10-12 second horn only
 - B. Red Light Flashing only
 - C. Flashing red light, 10-12 second horn, with another horn approximately every 60 seconds
 - D. All of the above
15. When the pressure gauge on a BioPak 240 reads 2250 PSI you have approximately how much duration left?
- A. 2.5 hours
 - B. 3 hours
 - C. 120 minutes
 - D. 3-1/2 hours

Part 2, True or False

Circle "True" or "False"

16. If during the first ten minutes of operation, the USER sees a Blue Flashing Light on his gauge and light indicator, the user should change his battery.
- TRUE
FALSE
17. The BioPak 240 will generally provide you with 4 hours of working time if you consume or use 900 psi of oxygen every hour.
- TRUE
FALSE
18. You should always check for a completed turnaround maintenance tag before donning a BioPak 240 Revolution.
- TRUE
FALSE
19. It is acceptable to use only one solid CO₂ canister.
- TRUE
FALSE

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20. The BioPak 240 Revolution should not be used, and it should be thoroughly inspected, if the Turnaround Maintenance Tag is missing

TRUE
FALSE

21. It is accepted practice to train or use the BioPak 240 without installing two frozen ice canisters.

TRUE
FALSE

22. It is accepted practice to train or use the BioPak 240 without the USER personally inspecting the solid CO₂ absorbent canister, ice canisters, facemask, alarm test, and the oxygen cylinder pressure.

TRUE
FALSE

23. Checking the facemask and the inhalation/exhalation check valve operation on the BioPak 240 Revolution is the responsibility of the Benchman/Technician.

TRUE
FALSE

24. During normal operation of the BioPak 240 Revolution it is acceptable to practice to depress the Emergency By-Pass valve to clear the face-mask of fogging.

TRUE
FALSE

25. When performing the constant flow test the flow meter must read a minimum of 1.5 lpm and a maximum of 2.4 lpm.

TRUE
FALSE

26. When performing routine turn-around maintenance the diaphragm MUST be removed from the breathing chamber.

TRUE
FALSE

27. The moisture control sponge system's only function is to absorb moisture.

TRUE
FALSE

28. From a safety perspective it is acceptable to check your gauge every 60 minutes.

TRUE
FALSE

29. The solid CO₂ absorbent cartridge is placed in the breathing chamber with the Red Button pointing UP.

TRUE
FALSE

Part 3 Multiple Choice

Circle the correct letter. Circle only one letter for each question.

30. The facemask adapter check valves are a critical component because they:
- A. Provide positive pressure
 - B. Keep the BioPak 240 R from leaking
 - C. Remove CO₂ from the SCBA
 - D. Ensure exhalation gas exits the mask on the right side & inhalation gas enters the mask on the left side
 - E. Controls the proper directional flow of the breathing gas
 - F. D & E
31. After performing routine turn-around maintenance the hoses and facemask adapter is installed with the arrows on the facemask adapter pointed in the up position to ensure:
- A. Cooled inhalation breathing gas enters the facemask from the left side.
 - B. Warm moist exhalation gas exits the facemask on the right side.
 - C. CO₂ laden exhalation gas exits the facemask on the left side.
 - D. The facemask adapter properly seals on to the facemask.
 - E. A and B
 - F. All of the above.
32. When performing routine turn-around maintenance the magnehelic gauge is used to perform the:
- A. Constant flow-rate test
 - B. Alarm test
 - C. Breathing loop low pressure leak test
 - D. Breathing loop high pressure leak test
33. Routine turn-around maintenance includes all the following EXCEPT:
- A. Flow test
 - B. Wash/disinfect and dry
 - C. Apply anti-fog agent
 - D. Low pressure leak test
 - E. High pressure leak test
 - F. Ice canisters placed in freeze forms and in freezer
34. A low battery alarm is indicated by:
- A. Flashing red light followed by a horn
 - B. A series of red, green and blue flashing lights
 - C. A series of red, green and blue flashing lights and a horn
 - D. Flashing blue light
35. When preparing the BioPak 240 Revolution for routine turn-around maintenance all of the following are performed EXCEPT:
- A. Remove and discard the used CO₂ absorbent cartridges and gaskets
 - B. Disconnect all the electrical cables from the RMS
 - C. Attach the oxygen line plug tool to the two oxygen fittings on the breathing chamber
 - D. Burnish the anti-fog lens insert in the facemask

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36. When washing and disinfecting the breathing chamber caution must be used to ensure:
- A. The weight and force of the water does not pull the diaphragm out of the chamber
 - B. Hot water is used
 - C. Bleach water is used
 - D. Finger cot is used to cover the flow restrictor
37. All of the following are washed and disinfected during routine turn-around maintenance EXCEPT:
- A. Facemask, hoses with adapter
 - B. Breathing chamber lid
 - C. Breathing chamber
 - D. RMS housing
38. When the gauge line becomes severed the USER must:
- A. Exit the area immediately, but do not panic
 - B. Disconnect the gauge line quick-disconnect
 - C. Use the emergency by-pass
 - D. Turn off the cylinder to conserve oxygen
 - E. A and B
39. If you receive a Blue Flashing Light on the TRIM you should:
- A. Ignore the light
 - B. Check to see if you have CO2 absorbent installed
 - C. Verify that you have two frozen ice canisters in the BioPak 240 R
 - D. Check to see if you have enough oxygen pressure
 - E. Insert a fresh battery
40. The anti-fog spray works BEST when:
- A. Applied only once
 - B. Slightly buffed on the inside lens
 - C. Applied once when stored and once prior to use
 - D. Applied to a clean and dry facemask
 - E. C & D