

## Nitrox Diver – Module 1 – Version 1

1. If a cylinder with air (21 of oxygen) is filled at 100 bars, what is the partial pressure of the oxygen?

- a) 2.1 bar
- b) 10 bar
- c) 21 bar
- d) 100 bar

2. If the body's natural defence system against reactive oxygen is overwhelmed, the diver can have convulsions comparable to an epileptic seizure.

- a) True
- b) False

3. You can only benefit from Nitrox if you make repetitive dives.

- a) True
- b) False

4. Convulsions due to a high oxygen partial pressure can come without any warning.

- a) True
- b) False

5. For their planning, divers calculate their maximum depth so that they do not exceed an oxygen partial pressure of 1.4 bars. They do that because (check all correct answers):

- a) At that pressure the risk of convulsions becomes very high.
- b) To have a margin for mistakes with buoyancy.
- c) To have a margin for when they end up in a downward current.
- d) To have a margin in case they are inattentive in monitoring their depth gauge.
- e) Because it takes the (unclear) time factor into account.

6. Which of the following (potential) problems are related to oxygen (check all correct answers)?

- a) Fire
- b) Corrosion
- c) Physiological problems
- d) None of the above

7. Use the equivalent air depth formula to calculate the EAD for a dive at 20 metres depth with Nitrox 32.

$$EAD = \left[ \frac{1 - \%O_2}{0.79} \times (\text{depth} + 10) \right] - 10$$

- a) 10.8 metres
- b) 15.8 metres
- c) 20.8 metres
- d) 25.8 metres

8. The lower nitrogen content in Nitrox extends the no-decompression limit.

- a) True
- b) False

9. If a cylinder with Nitrox 32 (32 % of oxygen) is filled at 200 bars, what is the partial pressure of the oxygen?

- a) 3.2 bar
- b) 6.4 bar
- c) 32 bar
- d) 64 bar

10. Using the formula for the contingency depth calculate the depth at which an oxygen partial pressure of 1.6 bars is reached for a dive with Nitrox 32.

$$\text{Max}_{\text{Planning}} = \frac{14}{\%O_2} - 10 \quad \text{Max}_{\text{Contingency}} = \frac{16}{\%O_2} - 10$$

- a) 50 metres
- b) 40 metres
- c) 37 metres
- d) None of the above