SDI Open Water Scuba Diver Exam

Version A v.0716
Instructor Answer Key

1. Objects under water appear:

D. Both the first and third answers are correct.

2. How much faster does sound travel in water, compared to air?

B. Four times as fast.

3. Water conducts heat away from your body:

D. Twenty-five faster than air does.

4. As you descend:

A. Colors appear to fade.

B. Reds and oranges are among the first colors to disappear.

C. At 30 meters (100 feet), things may appear predominantly blue and gray.

D. All of the above.

5. Below what water temperature does your body require some form of thermal protection?

C. 29°C/86°F.

6. What does SCUBA stand for?

A. Self contained underwater breathing apparatus.

7. When water stratifies itself into layers, according to temperature, the boundary between layers is known as a:

D. Thermocline.

8. What is the primary cause of waves?

C. Winds.

9. Which of the following factors do we take into account when measuring waves?

D. Both the first and second answers are correct. (A. Height. & B. Length.)

10. Which of the following is incorrect?

B. Waves are not hazardous to divers during shore dives.

11. The consequences of becoming cold under water include all of the following, except:

B. Improved judgment and coordination.

12. Because sound travels faster under water:

C. It is harder to determine the direction from which a sound is coming.

13. Entering through surf requires special skills. These skills are often included in beginning scuba course taught in areas in which surf entries are common.

A. True.

14. Which of the following is/are true?

B. Surge is the back-and-forth movement of water caused by waves passing over head.

15. Which of the following is/are true?

A. The sun warming water near the equator, coupled with the earth's rotation, is the primary cause of permanent ocean currents.

16. Despite its apparent warmth, divers in tropical water still need to consider the need for thermal protection.

A. True.

17. Longshore currents always move in the same direction as prevailing offshore currents.

B. False.

18. A rip current is a narrow flow of swiftly moving water that runs parallel to shore.

B. False.

19. The trick to dealing with surge is to anticipate its action in order to avoid contact with stationary objects.

A. True

20. What is the most effective way to get out of a rip current?

B. Swim parallel to shore, until you are completely out of the rip current, then swim in towards shore.

21. In general, the best time to dive is during slack tide, the period between high and low tides.

A. True.

22. We pose a vastly greater threat to underwater plant and animal life than they do to us.

A. True.

23. What causes most marine life injuries?

D. Both the first and third answers are correct. (A. An animal's defensive response to a perceived threat. & C. Mistaken identity.)

24. What ability best helps you avoid damage to the fragile aquatic environment?

B. Buoyancy control.

25. All of the following are steps can you take to avoid scrapes and abrasions, except:

C. Wear minimal exposure protection.

26. Some aquatic animals possess stinging cells. These are called:

B. Nematocysts.

27. Marine animal bites are almost always the result of the animal defending itself or a case of mistaken identity.

A. True.

28. Always stay within your level of experience. As an open water diver you should not venture into overhead environments such as a cave or wreck.

A. True.

29. The states of buoyancy include all of the following except:

B. Passive

30. A scuba cylinder that normally lasts one hour at the surface will last _____ minutes at 20 meters/66 feet.

B. 20

31. If you feel pain or discomfort in your ears during descent:

B. Ascend to the point where you can comfortably equalize, and only then continue your descent.

32. The single most important rule of scuba diving is:

B. Breathe continuously; never hold your breath.

33. Among the best ways to prevent decompression sickness (DCS):

A. Remain well within your dive computer's no-decompression limit.

B. Ascend no faster than the rate allowed by the dive computer.

C. Make a safety stop of between three and five minutes at a depth of 3-6 m/10-20 ft.

D. All of the above.

34. The signs and symptoms of decompression sickness can include:

A. Headache and nausea.

B. Pain in the joints.

C. Loss of feeling in the extremities.

D. All of the above.

35. The chief cause of nitrogen narcosis is:

B. The elevated partial pressure of nitrogen divers experience at depth.

36. _____ causes extreme headache and nausea, may cause the lips and fingernail beds to turn bright red and, in high enough concentrations, can cause unconsciousness.

C. Carbon monoxide

37. A mask must cover the nose:

C. So that you can keep the pressure inside the mask equal to the pressure outside.

38. The types of fins commonly used by recreational scuba divers include:

D. Both the first and third answers are correct. (A. Full-foot fins. & C. Open-heel/ adjustable fins.)

39. Basic post-dive equipment maintenance and care includes:

A. Rinsing thoroughly with fresh water.

B. Allowing to dry completely.

C. Storing in a cool, dry place, away from direct sunlight.

D. All of the above.

40. Common exposure suit types include:

A. Dive skins.

B. Wet suits.

C. Dry suits.

D. All of the above.

41. Your body loses the greatest amount of heat through the:

A. Head.

42. Common BCD components include all of the following except:

B. CO_2 inflation mechanism.

43. Common weight systems include:

D. Both the first and second answers are correct. (A. Weight belts. & B. BCDs with integrated weight systems.)

44. A regulator system may include:

A. A first stage and primary second stage.

B. An alternate air source second stage (or a connection to an alternate-air-source inflator on the BCD).

C. A submersible pressure gauge (SPG), which is usually part of an instrument console.

D. All of the above.

45. A regulator equipped with a conventional alternate-air-source second stage:

D. Both the first and third answers are correct. (A. Is among the most widely used and readily understood type of alternate air source. & C. Allows the donor to give either second stage to an out-of-air diver.)

46. Scuba cylinders must periodically undergo:

D. Both the first and third answers are correct. (A. Hydrostatic testing. & C. Visual inspections.)

47. The minimum information most dive computers provide you with while in Dive mode include:

A. Current and maximum dive depth.

B. Actual bottom time.

C. Decompression status (no-deco limit or required deco).

D. All of the above.

48. Steps in equipment assembly include all of the following except:

C. Depressurize system and test regulators.

49. What piece of equipment should never be allowed to dangle freely?

D. Both the first and third answers are correct. (A. Alternate-air-source second stage. & C. Submersible pressure gauge or instrument console.)

50. Which is the most common boat entry technique?

D. Giant stride.

51. Before you can remove the regulator from your scuba cylinder, you must:

D. Both the first and second answers are correct. (A.Turn the air all the way off. & B. Depressurize the system by depressing and holding one of the purge buttons.)

52. The key to using air efficiently while breathing from scuba is to:

A. Breathe slowly and deeply.

53. Common methods for clearing water from a regulator second stage include:

D. Both the first and third answers are correct. (A. Exhaling into the second stage. & C. Depressing the purge button.)

54. Key points in recovering a second stage using the sweep method include:

B. Leaning forward, dipping your right shoulder.

55. When clearing a mask of water, you should form a seal by:

B. Pushing in at the top and sides.

56. Having just enough weight to achieve all thee states of buoyancy with only minor adjustments in the water" is the definition of:

C. Proper weighting.

57. Among the key points in using your BCD to help maintain neutral buoyancy under water:

B. To be successful in maintaining neutral buoyancy, you must be: aware of changes in depth; and, anticipate the need to add or vent air from your BC by keeping a hand on the inflator.

58. If your buoyancy is under control, you should be able to hover at any time by:

C. Not kicking or moving.

59. Among the key points in doing a flutter kick correctly:

A. Keep the legs straight and make long, slow kicks from the hips.

60. Situations in which you might want to remove your weight system include:

D. Both the first and third answers are correct. (A. Emergencies. & C. Small boat exits.)

61. You can best don your scuba unit at the surface by:

D. Both the second and third answers are correct. (B. Putting it on like a jacket. & C. Sitting on it.)

62. Which type of alternate air source does not necessarily require the donor to give up his primary second stage?

C. Conventional alternate-air-source second stage.

63. An independent emergency ascent may be the best response to an out-of-air/low-on-air situation:

B. If the surface is closer than a buddy (or any other diver) who is equipped and ready to share air.

64. Techniques commonly used to navigate under water include:

D. Both the first and third answers are correct. (A. Natural navigation. & C. Compass navigation.)

65. Always dive within the limits of your:

A. Training.
B. Equipment.
C. Experience.
D. All of the above.

66. Activities that may increase the risk of decompression sickness include:

D. Both the first and third answers are correct. (A. Alcohol use.& C. Drug use.)

67. Among the things dive buddies must agree upon prior to a dive are:

A. Depth and time limits.
B. Planned activity.
C. Procedure to follow if separated.
D. All of the above.

68. If you become separated from your buddy, search for no more than _____ _____, then surface.

A. One minute

69. Dive planning elements may include all of the following except:

D. Deciding whose computer to follow.

70. On most repetitive dives, your computer will provide _____ no-decompression limits than on single dives.

B. More conservative

71. Should you accidentally exceed your dive computer's no-decompression limit.

C. Air permitting, make the decompression stop indicated by your dive computer. Afterward, monitor for signs and symptoms of decompression sickness.

72. At the first sign of overexertion:

B. Stop, relax and breathe deeply.

73. If you cannot reunite with a missing buddy:

C. Leave underwater searches to trained professionals.

74. Seasickness is caused by:

B. A change in equilibrium in the inner ear.

75. If you suspect that you or another diver is suffering from decompression sickness.

D. Both the second and third answers are correct.