National Marine Manufacturers Association
Compliance Specialist Exam
Buoyancy in the event of Swamping/Flooding (2022 MY)
ABYC H-8 (7/2017)

1. The submerged weight conversion factor for Aluminum is:
   a. 0.88
   b. 0.85
   c. 0.63
   d. 0.17

2. What is the submerged weight of a 350 lb. aluminum boat hull?
   a. 215
   b. 215.5
   c. 220.5
   d. 225

3. A 19 ft outboard boat rated for 15hp must meet______ requirements:
   a. Basic Flotation
   b. Level Flotation
   c. Modified level flotation
   d. None of the above

4. The static floating position is determined:
   a. With fuel tanks empty
   b. With water tanks empty
   c. With Portable gear on board
   d. In salt water

5. Flotation material installed in a sterndrive boat engine compartment must be resistant to gasoline, oil, and trisodium solution.
   a. True
   b. False

6. A “jet boat – lightweight” is defined as having the following except:
   a. Boat Weight less than 3,000 lbs.
   b. Length less than 20 feet
   c. Inboard engine powering a water jet pump as its primary propulsion
   d. Requires Basic Flotation
7. Flotation under H-8 is required for:
   a. For boats 20 feet and less
   b. For boats less than 20 feet
   c. For pontoons less than 26 feet
   d. Canoes and Kayaks

8. For basic flotation, a boat that has passed a physical flotation test after appropriate preparation and weights applied according to the test procedures shall have:
   a. Both fore and aft reference areas above the surface of the water
   b. At least 12” of the bow above the surface of the water
   c. At least 18” of the bow above the surface of the water
   d. Any portion of the boat above the surface of the water

9. If a cubic foot of flotation foam weighs 2 lbs., what is the buoyancy of 16 cubic feet?
   a. 844
   b. 966
   c. 1006
   d. 1016

10. For boats utilizing Level Flotation, a representative sample shall pass the requirements of H-8.8 by a physical test.
    a. True
    b. False

11. For boats utilizing Basic Flotation, a representative sample must pass the requirements of H-8 by a physical test.
    a. True
    b. False

12. To successfully pass the stability test of the level flotation requirement:
    a. The angle of heel must not exceed 10 degrees
    b. The angle of heel must not exceed 20 degrees
    c. The reference depth measured at the immersed reference area shall be 6 inches or less
    d. The reference depth measured at the immersed reference area shall be 12 inches or less
13. Regarding the preconditioning of a boat for a flotation test, which of the following is a correct statement?
   a. Windshields and convertible tops must be removed
   b. Optional equipment for which the manufacture has made design provision for future permanent installation by the dealer is accounted for.
   c. Swamp the boat for at least 48 hours
   d. Fuel tanks shall be no more than ½ full

14. What is the theoretical line, where dry weights will be used above it and submerged weights will be used below it, when calculating for the needed flotation?
   a. Swamped waterline
   b. Static float plane
   c. Reference Depth
   d. Heeled Waterline

15. Integral air chambers:
   a. Are permitted for flotation in lieu of foam
   b. Shall be filled with water for a flotation test, effectively not permitting integral air chambers for flotation
   c. Must be tested to 3 psi
   d. Filled with salt water

16. What is the buoyancy of 8 cubic feet of 2-pound flotation foam?
   a. 483 lbs.
   b. 384 lbs.
   c. 64 lbs.
   d. 16 lbs.

17. An 18-foot boat has passenger carrying area measuring 12 ft by 6 ft. What is its loading area?
   a. 3.2 ft by 2 ft
   b. 4.8 ft by 2.4 ft
   c. 5.6 ft by 4.55 ft
   d. 8.4 ft by 4.2 ft
18. For a sterndrive and inboard boat, dead weight is:
   a. The maximum capacity marked on the boat, plus the persons capacity marked on the boat
   b. The maximum capacity marked on the boat, minus the engine and persons capacity marked on the boat
   c. The maximum capacity marked on the boat, minus the persons capacity marked on the boat
   d. None of the above

19. After pre-conditioning, a boat meeting basic flotation must have enough flotation to keep a portion of the boat above the surface of the water when loaded with weights:
   a. Equal to 25% of the persons capacity marked on the boat
   b. Equal to 25% of the dry weights of propulsion system and battery(s)
   c. Equal to 50% of the dead weight
   d. Equal to 75% of the fuel weight

20. When calculating basic flotation requirements, the value $K_1$ and $K_2$:
   a. Is the dry weight of the hull, i.e., everything below swamped water line
   b. Is the submerged weight conversion factor for different materials
   c. Is the dry weight for factory installed equipment, hardware, and accessories
   d. Is the buoyancy of the flotation material