- 1. If navigation lights are installed, an anchor light must be permanently installed.
 - a. True
 - b. False
- 2. 12 volt (nominal) navigation lights with metal fixtures may be grounded (negative lead) to the fixture frame if
 - a. The fixture be mounted on a conductive surface
 - b. The lights are tested according to 16.Ap.B.1 and labeled "watertight"
 - c. There is no polarity identified or observed
 - d. Only the negative lead is attached and polarity is identified
- 3. Prior to determining the static floating position:
 - a. The datum water line must be established
 - b. The potable water tanks must be full
 - c. All factory installed equipment and options be installed
 - d. Portable gear must be on board
- 4. A 40 ft. vessel has separate side lights and an 18" tall all-around light mounted on the flybridge on the boats centerline. Which of the following is correct?
 - a. This is not an acceptable lighting configuration
 - b. The boat may operate in inland waters only
 - c. The boat may operate in inland or international waters, if sailing
 - d. The boat may operate in inland or international waters
- 5. Lights installed above the sheer line shall
 - a. Be watertight
 - b. Contain fixed and non-reusable gaskets
 - c. Be weathertight
 - d. Contain combination sidelights
- 6. A combination side light on a 20 ft vessel
 - a. Must project to 90 degrees abaft the port and starboard beam
 - b. Must project to 22.5 degrees abaft the port and starboard beam
 - c. Must project a horizontal arc of visibility totaling 235 degrees
 - d. Must project a horizontal arc of visibility totaling 112.5 degrees

- 7. To classify as weathertight, internal critical components must not come in contact with water when subjected to
 - a. Continuous water spray for 15 minutes
 - b. Water pressure of 15 psi (100kPa) for 15 minutes
 - c. Water pressure of 15 psi (100kPa) for 5 minutes
 - d. Continuous water spray for 5 minutes
- 8. Navigation lights shall be installed:
 - a. To prevent damage in any situation
 - b. To prevent reflected glare from fog or mist
 - c. To prevent reflection off a vessel's structure
 - d. To prevent reflection from other vessels
- 9. The maximum allowable voltage drop used for sizing conductors for navigation lights is:
 - a. 10 percent
 - b. 10 percent if lights contain the marking "A-16"
 - c. 3 percent
 - d. 3 percent for boats over 12 meters
- 10. Navigation lights:
 - a. Shall be designed so that the bulb(s) can be replaced without using tools
 - b. Shall be provided with a means to assist in the proper alignment of the light
 - c. Shall be designed with drain openings to allow water to drain from the interior of the fixture
 - d. Shall have interchangeable lenses
- 11. An anchor light on a vessel
 - a. Less then 20 meters shall be rated to 2 NM
 - b. Less then 20 meters shall be rated to 1 NM
 - c. Less then 12 meters shall be rated to 1 NM
 - d. Greater than 12 meters and less than 20 meters shall be rated to 3 NM

12. A masthead light on a 40 ft power driven vessel must be:

- a. At lest 8 ft above the waterline
- b. At least 8 feet above the gunwale
- c. At least 2.5 ft above the gunwale
- d. At least 2.5 meters above the waterline
- 13. The lamp specified by the navigation light manufacture shall be tested
 - a. At 93% of the of the intended nominal system voltage
 - b. At 100% of the of the intended nominal system voltage
 - c. At 107% of the of the intended nominal system voltage
 - d. At a determined range around the nominal system voltage
- 14. All navigation light markings must be tested to
 - a. UL 1114
 - b. UL 1104
 - c. UL 1004
 - d. UL 4011
- 15. All vessels may use either 72 COLREGS or "Inland Rules" navigation lights on navigable waters of the US.
 - a. True
 - b. False
- 16. For the purposes of NMMA certification, which of the following is not true?
 - a. All NMMA certified builders must provide NMMA with the type of navigation lights being installed
 - b. All NMMA certified boats must be equipped with navigation lights
 - c. All NMMA certified boats must use Type Accepted navigation lights
 - d. All NMMA certified boats will be inspected to insure compliance with A-16
- 17. Under ABYC, which statement is true?
 - a. All vessels under 12 meters must follow the "Inland Rules"
 - b. A anchor light need not be permanently installed
 - c. The sidelight may never be installed below the sheerline
 - d. A towing light is a all-around yellow light

- 18. A 40ft vessel is required to be equipped with a bell
 - a. True
 - b. False

19. Sound signal devices for all vessels over 12 meters:

- a. Can utilize fluorinated hydrocarbon gases
- b. Shall be tested at 105% of the intended nominal voltage
- c. Shall not be more then 5dB below the prescribed sound pressure within $+/-45^{\circ}$ of the axis
- d. Shall be mounted with their sound pressure level directed straight ahead
- 20. Each sound signal appliance shall contain:
 - a. The manufacture's name (or identifying mark)
 - b. The manufacture's name (or identifying mark), and A-23
 - c. A-23
 - d. USCG or 72 COLREGS
- 21. The minimum sound intensity of a bell shall be:
 - a. $98 \, dB(A)$ at one meter
 - b. 105 dB(A) at one meter
 - c. 110 dB(A) at one meter
 - d. 120 dB(A) at one meter
- 22. On a vessel five meters or less, used only in U.S. inland waterways, the horn does not have any frequency requirements.
 - a. True
 - b. False
- 23. A sound signaling appliance that is mounted below the sheerline of the vessel must:
 - a. Be labeled "weatherproof"
 - b. Be labeled "waterproof"
 - c. Withstand exposure to salt spray without failure when tested according to ASTM B117
 - d. A sound signaling appliance can not be mounted below the sheerline

- 24. The sound signaling appliance or smallest container in which they are packaged shall be labeled with the correct application by vessel length and applicable waters.
 - a. True
 - b. False
- 25. Which of the following statements is NOT true?
 - a. The manufacture shall provide instructions for the installation, maintenance, and operation of the sound signal appliance
 - b. External parts of the sound signal appliance shall have no sharp edges
 - c. Under Inland Rules a bell may be substituted where a whistle is required
 - d. Percussion bells shall be made of corrosion resistant materials