

26. Ascending and descending air masses with different temperatures is part of an important heat transmitting process in our atmosphere. Which term is given to this process?

- (A) Convection
- (B) Barometric inversion
- (C) Radiation
- (D) Conduction

If choice A is selected set score to 1.

27. In which source could you find the number of a chart for a certain geographic area?

- (A) Chart No. 1
- (B) American Practical Navigator
- (C) Catalog of Charts
- (D) U.S. Coast Guard Light List

If choice C is selected set score to 1.

28. A Doppler speed log indicates speed through the water _____.

- (A) in the bottom return mode
- (B) at all times
- (C) only when there is no current
- (D) in the volume reverberation mode

If choice D is selected set score to 1.

29. Which line connects the points of zero magnetic dip?

- (A) An agonic line
- (B) A magnetic meridian
- (C) The magnetic equator
- (D) The terrestrial equator

If choice C is selected set score to 1.

30. Information about the pilotage available at Miami harbor may best be obtained from which publication?

- (A) Sailing Directions
- (B) World Port Index
- (C) United States Coast Pilot
- (D) Pilot Chart

If choice C is selected set score to 1.

31. Where will you find information about the duration of slack water for ports on the Atlantic Coast of North America?

- (A) American Practical Navigator
- (B) Sailing Directions
- (C) Tidal Current Tables
- (D) Tide Tables

If choice C is selected set score to 1.

32. Which is TRUE of the direction of flow (channel) on the Corps of Engineer's Navigation Maps?

- (A) The direction of flow (channel) is always midway between the banks
- (B) The direction of flow (channel) is not indicated
- (C) The direction of flow (channel) is indicated by a broken line
- (D) The direction of flow (channel) is indicated by depths (in feet)

If choice C is selected set score to 1.

33. Under the IALA-B Buoyage System, when entering from seaward, a buoy that should be left to port will be which color?

- (A) Green
- (B) Yellow
- (C) Black
- (D) Red

If choice A is selected set score to 1.

34. If several navigational lights are visible at the same time, each one may be positively identified by checking all of the following EXCEPT what against the Light List?

- (A) Color
- (B) Rhythm
- (C) Intensity
- (D) Period

If choice C is selected set score to 1.

35. How can you follow the approach of a dangerous cyclonic storm?

- (A) By monitoring the change in the sea temperature
- (B) Review the Coast Pilot or Sailing Directions
- (C) By a newspaper, a weather map, a weather fax, or a weather forecast
- (D) Utilizing the National Weather Service Observing Handbook No.1, Marine Surface Observations

If choice C is selected set score to 1.

36. A body can only be observed at lower transit when _____.

- (A) the algebraic sum of the colatitude and declination exceeds 90°
- (B) the body is circumpolar
- (C) the observer is in high latitudes above either polar circle
- (D) the declination is the opposite name to the latitude

If choice B is selected set score to 1.

37. You are anchored in the Aleutian Island chain and receive word that a tsunami is expected to strike the islands in six hours. What is the safest action?

- (A) Plant both anchors with about a 60° angle between them, and let out a long scope to each anchor.
- (B) Increase the scope of the anchor cable and drop the second anchor underfoot at short stay.
- (C) Get underway and be close inshore on the side of the island away from the tsunami.
- (D) Get underway and be in deep, open-ocean water when the tsunami arrives.

If choice D is selected set score to 1.

38. Which term refers to the direction a current is flowing?

- (A) Drift
- (B) Set
- (C) Stand
- (D) Vector direction

If choice B is selected set score to 1.

39. What causes the error of collimation with regards to the four adjustments to a sextant?

- (A) Telescope not parallel to the frame
- (B) The frame and index mirror not perpendicular
- (C) Personal error
- (D) The frame and horizon glass not perpendicular

If choice A is selected set score to 1.

40. Which term is given to the mechanical lifting of air by the upslope slant of the terrain?

- (A) Advective lifting
- (B) Convective lifting
- (C) Topographic lifting
- (D) Vertical lifting

If choice C is selected set score to 1.

41. What does the expression "the air is saturated" mean?

- (A) The vapor pressure is at its maximum for the prevailing temperature
- (B) The cloud cover is 100%
- (C) The relative humidity is 100%
- (D) The precipitation has commenced

If choice C is selected set score to 1.

42. Which is the term given to the time required for a lighted aid to complete a full cycle of light changes?

- (A) Set
- (B) Frequency
- (C) Function
- (D) Period

If choice D is selected set score to 1.

43. What is the approximate geographic range of Point Judith Light, Rhode Island, if your height of eye is 62 feet (18.9 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS". (use charted range of 20 miles as nominal range)

- (A) 9.6 nm
- (B) 16.5 nm
- (C) 18.6 nm
- (D) 20.7 nm

If choice C is selected set score to 1.

44. You are underway on course 328°T when you sight a buoy broad on your port bow. Which would indicate that you are in the best navigable water?

- (A) The buoy is a western quadrant buoy
- (B) The buoy is painted yellow on the top half and black on the bottom
- (C) The buoy has a topmark of two cones with points down
- (D) The buoy exhibits a light with the characteristic of VQ(3)5s

If choice D is selected set score to 1.

45. If an observer in the Northern Hemisphere faces the surface wind, where is the center of low pressure located?

- (A) To the right, and slightly behind
- (B) To the left, and slightly in front
- (C) To the right, and slightly in front
- (D) To the left, and slightly behind

If choice A is selected set score to 1.

46. When is the greatest directive horizontal force exerted on the magnetic compass of a vessel?

- (A) When the vessel is near the magnetic equator
- (B) When the vessel is near the magnetic poles
- (C) When the compass needles are nearly in line with the meridian
- (D) When the variation is near zero

If choice A is selected set score to 1.

47. Which condition(s) is (are) necessary for the formation of dew?

- (A) Available nuclei in the air
- (B) Clear skies
- (C) Moderate winds
- (D) A surface warmer than the dew point of the air

If choice B is selected set score to 1.

48. What is the average speed of movement of a hurricane prior to recurvature?

- (A) 4 to 6 knots
- (B) 6 to 8 knots
- (C) 10 to 12 knots
- (D) 15 to 20 knots

If choice C is selected set score to 1.

49. The vertex of a great circle track is in LONG 109°E. Which longitude would an eastbound vessel cross the equator?

- (A) 19°E
- (B) 161°E
- (C) 19°W
- (D) 161°W

If choice D is selected set score to 1.

50. Weather observations provided by each weather station include all of the following except which item?

- (A) Barometric pressure and change in the last three hours
- (B) Visibility
- (C) Predicted weather for the next twelve hours
- (D) Temperature

If choice C is selected set score to 1.