Advanced Coastal Cruising Practice Exam

1.) When does fog occur?

_____
_____

2.) What conditions are likely to create fog: (Mark with an **X** the correct answer(s))

____ warm air blowing over cool water
____ warm air blowing over warm land
____ warm air over cool land
____ cool air blowing over cool water

3.) Describe two different ways of putting your sailboat into a heave to.

_____
_____
_____

4.) List 5 officially recognized distress signals.

_____
_____
_____
_____
_____

5.) When the wind is abaft, is the apparent wind stronger or weaker than the true wind?

_____

6.) When the wind is abeam, is the apparent wind stronger or weaker than the true wind?

_____

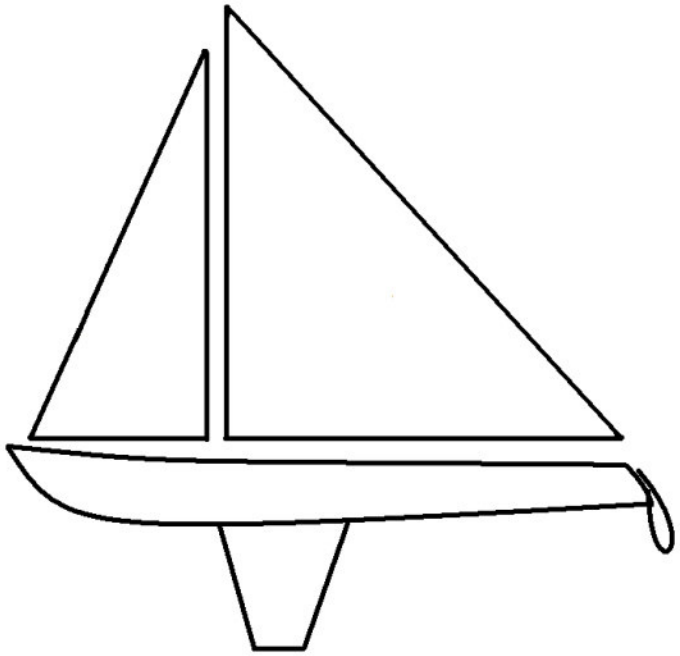
7.) When you are sailing downwind and decide to head up, what factors do you need to take into consider regarding apparent wind and true wind and what course of action should you take?

_____
_____
_____

8.) What is an easy way to determine a boat's Center of Lateral Resistance?

_____
_____

9.) Using the following diagram, find the center of effort (CE) and the center of lateral resistance CLR) for the boat shown.



10.) Describe the following types of clouds and the anticipated weather associated with each?

Cirrus:_____
_____
Altocumulus: _____
_____
Cumulus: _____
_____
Cumulonimbus: _____
_____

11.) What does a falling barometer indicate and what weather sort of weather can you anticipate?

_____
_____

12.) What is type of weather is associated with a fast rising or falling barometer?

_____
_____

13.) What kind of weather is associated with a barometer that remains steady?

_____
_____

14.) Mark the correct response with an **X**.

Reefing the mainsail will:	___ increase	____ decrease weather helm.
Moving the crew forward will:	___ increase	____ decrease lee helm.
Taking down the jib will:	___ increase	____ decrease weather helm.
Putting on a larger foresail will:	___ increase	____ decrease lee helm.
Tightening the mainsheet will:	___ increase	____ decrease weather helm.
Increase mast rake will:	___ increase	____ decrease lee helm.

15.) Describe what sail(s) and sail shapes are needed for different wind strengths and points of sail? (Light, Moderate, Strong and Very Strong Winds)

_____
_____
_____
_____
_____
_____
_____
_____

16.) What type of sails should a boat have in its sail inventory to handle different weather conditions?

_____
_____

17.) Describe how the boom vang is used for sail trimming at different points of sail and in light and strong winds.

_____
_____
_____

18.) What factors should you consider before allowing anyone onboard to go swimming?

_____
_____
_____

19.) Why should you not raft boats together at night?

_____
_____
_____

20.) Describe 3 ways to retrieve an anchor that has been fouled.

_____
_____
_____

21.) Describe 3 ways to secure a dinghy at night to prevent it from rubbing up against the boat.

_____
_____
_____
_____

22.) Describe 2 ways of anchoring in order to reduce anchor swing.

_____
_____

23.) When should you set an anchor watch?

_____
_____

24.) Describe two methods of determining whether you are dragging your anchor.

_____
_____

25.) Why is it important to have 2 people on deck at night.

_____
_____

26.) List the reasons for a preference for slight weather helm.

_____
_____

27.) List 3 sources of weather information in the U.S.

_____
_____

28.) Describe how you anchor a boat with the stern made fast to the dock.

_____
_____

29.) Describe how you would rig a towing bridal.

_____
_____

30.) What steps can you take to reduce or eliminate chafe.

_____
_____

31.) List what steps you would take to prepare the boat and crew as well as sail selection for foul weather.

_____
_____
_____
_____

32.) Describe the steps you would take before commencing a tow.

_____
_____
_____

33.) What is the maximum towing speed in ideal conditions.

_____

34.) Describe the steps to be taken when 'lying ahull'.

_____
_____
_____

35.) What is a trip line?

_____

36.) When would you use a trip line?

_____
_____

37.) What sort of bottom is more prone to fouling an anchor: (Mark the correct answer(s) with an **X**)

____ mud
____ sand
____ rocky
____ grass

38.) What should you do if your engine fails in a busy channel?

_____
_____
_____

39.) What steps should you take when your boat has run aground in a falling tide?

_____
_____
_____

40.) Describe the possible causes of engine over heating and what steps should be taken in order to correct the problem?

_____
_____
_____

41.) After you have cleaned your ignition points you should: (Mark the correct answer(s) with an **X**)

___ oil them
___ re-gap them
___ rub them with a fine sand paper
___ wipe them with a rag

42.) What is meant by a boats range?

_____
_____

43.) What elements can affect a boat's range?

_____
_____

44.) How much drinking water does the boat you are on hold?

_____

45.) Describe 2 ways of determining water depth?

_____

46.) When do you fly the ensign (National flag)?

_____

47.) Where do you fly the ensign?

_____

48.) What is the courtesy flag?

_____

49.) Where do you fly the courtesy flag?

_____

50.) What steps do you take and what documents should you produce when returning to the U.S. from another country?

_____
_____
_____

51.) When would you wear a harness?

_____
_____

52.) Describe how you would temporally ground a boat to protect against lightning.

_____
_____

53.) Describe the skippers responsibilities and actions for the following courtesies:

Permission to come aboard: _____
_____
Rights of first anchorage: _____
_____
Permission to come along side: _____
_____
Checking boats appearance: _____
_____

54.) When would you use a radar reflector and where would you place it?

_____
_____

55.) What minimum preseason maintenance and checks would you perform for the following:

- Hull (underwater fittings, electrical systems, painting, antifouling)
- Spars and rigging (including electrolysis)
- Sails

_____
_____
_____
_____

56.) What is the danger of overhead power lines?

_____
_____

The End

(Answer Key Next Page)

Advanced Coastal Cruising Practice Exam

(Answer Key)

1. When the air temperature drops down to it's dew point (see page: 31 Study Guide)

2. __X__ warm air blowing over cool water
   _____ warm air blowing over warm land
   __X__ warm air over cool land
   _____ cool air blowing over cool water

   Fog will not form in windy conditions over land.

3. See page: 50 Study Guide

4. Signal Flags 'NC', SOS by any means, Mayday on radio, orange flag with a square over a circle, orange smoke (for others, see page: 63 Study Guide)

5. Weaker

6. Stronger

7. Apparent wind will be stronger since you are now turning up into the wind. May need to let out or shorten sails. Boat may not be overpowered going downwind because the apparent wind is not as strong. When you turn into the wind, the apparent wind could be much strong than the true wind.

8. At a dock standing beside the boat, push the boat sideways with one hand. If the bow moves more than the stern, you are too far forward. When you find the spot where the bow and the stern move equally, you have found the CLR.

9. See page: 15 Study Guide

10. See page: 36 Study Guide

11. Dropping air pressure signals the approach of a low pressure system. Unstable weather (rain) is associated with low pressure systems. Anticipate squalls along the front. The faster the drop in the air pressure the worse the weather and the stronger the winds. (See page: 29 Study Guide)

12. Rising air pressure signals the approach of a high pressure system (cold front). Cold fronts can produce extreme weather and should be avoided. Once the cold front has passed, the skies should clear. High pressures systems are associated with cool, dry air masses which typically means clear blue skies. (See page: 29 Study Guide)

13. Weather pattern will remain the same.

14.

Reefing the mainsail will:	___ increase	_X_ decrease weather helm.
Moving the crew forward will:	___ increase	_X_ decrease lee helm.
Taking down the jib will:	_X_ increase	___ decrease weather helm.
Putting on a larger foresail will:	_X_ increase	___ decrease lee helm.
Tightening the mainsheet will:	_X_ increase	___ decrease weather helm.
Increase mast rake will:	_ _ increase	_X_ decrease lee helm.

15. See page: 24 Study Guide

16. Mainsail with 2 or 3 reef points, storm trysail, working jib, #4 jib, storm jib

17. See pages: 28 and 29 Study Guide

18. See page: 81 Study Guide

19. See page: 52 Study Guide

20. See page: 58 Study Guide

21. See page: 53 Study Guide

22. See page: 55 Study Guide (consider drawing the diagrams on pages 55, 56 & 57 as part of your answer)

23. See page: 60 Study Guide

24. Use a fixed object on the port and starboard side of the boat and line them up with fixed objects on shore. Compare the change in position as the boat swings. Take bearings on fixed objects 90° apart onshore and then compare changes in bearings. Use GPS.(See page: 55 Study Guide)

25. Safety is primary. Should a crew member go overboard, the second person on deck could sound the alarm and be able to position the MOB. Second person on deck is also a second set of eyes to serve as a lookout. Two people on deck can help keep each other awake. In event of a rigging failure, second person on deck is another set of hands. (See page: 45 Study Guide)

26. See page: 20 Study Guide

27. See page: 38 Study Guide

28. See page: 54 Study Guide (consider drawing the diagram on page 54 as part of your answer)

29. See page: 63 Study Guide (consider drawing the diagram on page 63 as part of your answer)

30. See page: 45 Study Guide

31. See page: 40 Study Guide

32. See pages: 48 and 63 Study Guide

33. Two thirds of the maximum theoretical hull speed (See page: 65 Study Guide)

34. See page: 50 Study Guide

36. See page: 58 Study Guide

37. A rocky bottom is most likely to foul your anchor.

38. See page: 70 Study Guide

39. See page: 68 Study Guide

40. See page: 69 Study Guide

41. Re-gap is the only correct response.

42. See page: 71 Study Guide

43. See page: 71 Study Guide

44. See page: 72 Study Guide

45. Lead line and electronic sounder (See page: 83 Study Guide)

46. See page: 73 Study Guide

47. See page: 74 Study Guide

48. See page: 74 Study Guide

49. See page: 74 Study Guide

50. See page: 76 Study Guide

51. See page: 41 Study Guide

52. See page: 80 Study Guide

53. See page: 73 Study Guide

54. See page: 81 Study Guide

55. See page: 79 Study Guide

56. See page: 81 Study Guide