

1. Define transfer

2. Define advance

3. Define high tide

4. Define low tide

5. Define stand

6. Define range

7. Define MBE

8. Define MBF

9.  $85^{\circ}\text{F}$  is how many  $^{\circ}\text{C}$ ?

10.  $22^{\circ}\text{C}$  is how many  $^{\circ}\text{F}$ ?

11. Define barycenter

12. When the moon is furthest from the earth it is in?

13. When the moon is closest from the earth it is in?

14. What is the range of the beaufort scale?

15. Describe the function of the beaufort scale

16. What device gives you apparent wind speed?

17. What device gives you apparent wind direction?

18. What is a barometer?

19. What is a hygrometer/psychrometer?

20. Define set

21. Define drift

22. Define spring tides, how often do they occur?

23. Define neap tides, how often do they occur?

24. Define semidiurnal tide

25. Define diurnal tide

26. Define mixed tide

27. What is one location that experiences mixed tide?

28. What is one location that experiences diurnal tide?

29. What is one location that experiences semidiurnal tide?

30. What instrument is used to predict the approach of a low-pressure system?

31. Name and describe 2 major ocean currents

32. Spring tides occur when the moon is  
in \_\_\_\_\_ and \_\_\_\_\_

33. Define current

34. Define slack

35. What continents/countries cover IALA-A and IALA-B?

36. You are outbound for sea in the port of Mokpo, Korea. You see a green buoy dead ahead, what should you do?

37. What device tells you depth of water beneath your keel?

38. The dry bulb temperature is  $65^{\circ}\text{F}$  and the wet bulb temperature is  $50^{\circ}\text{F}$ . What is the relative humidity?

39. The dry bulb temperature is  $62^{\circ}\text{F}$  and the wet bulb temperature is  $55^{\circ}\text{F}$ . What is the relative humidity?

40. What are 2 meteorological factors that could cause variations in sea level and alter the accuracy of tidal predictions?

41. Where would you find a vessel's advance and transfer distances for various stability conditions and rudder angles?

42. A red light flashes (Zfl) means what in Mexico?

43. For voyage planning purposes, a region on a chart where it is dangerous for your vessel to transit would be labeled as?

44. You are on a course of  $085^{\circ}T$  at a speed of 15 KTS. Your apparent wind is  $005^{\circ}T @ 26$  KTS. What is the true wind direction and speed.

45. You are on a course of  $200^{\circ}T$  at a speed of 22 KTS. Your apparent wind is  $105^{\circ}T @ 14$  KTS. What is the true wind direction and speed.

46. You wish to make good a course of  $166^{\circ}T$  while turning engine RPM for a speed of 11.6 KTS. The set is  $256^{\circ}T$  and the drift is 3.0 KTS. What course should you steer?

47. You wish to make good a course of  $203^{\circ}T$  while turning engine RPM for a speed of 9 KTS. The set is  $294^{\circ}T$  and the drift is 5 KTS. What course should you steer?

48. You are on a course of  $341^{\circ}T @ 12$  KTS. Over a 24 minute period of time you have actually travelled 4.6 nm with a CMG of  $349^{\circ}T$ . What is the set and drift you are experiencing?

49. You are on a course of  $241^{\circ}T$  @ 10 KTS. Over a 30 minute period of time you have actually travelled 3.4 nm with a CMG of  $234^{\circ}T$ . What is the set and drift you are experiencing?

50. On February 4 1983, at 1752 EST (20+5) what will the predicted height of tide be at Sachem Head, Conn? Answer to nearest tenth of a foot.

51. What will the direction and velocity of the tidal current at Barnstable Harbor at 1435 DST (ZD+4) on June 8 1983? Answer velocity to the nearest tenth of a knot and direction in degrees T.

52. What will the direction and velocity of the tidal current at Port Royal at 1900 DST (ZD+5) on June 4 1983? Answer velocity to the nearest tenth of a knot and direction in degrees T.

52. You must cross under a bridge near Poughkeepsie Bridge, NY on December 04. The bridge has a charted clearance of 35 feet. Your air draft is 37 feet. What is the latest time before 0700 that you can pass?

53. You are underway on a vessel with a deep draft of 20 feet. You are in an area where the charted depth is 10 feet. What is the latest time before 0700 that you can pass?

the charted depth of the water is 5 fathoms.

You calculate height of tide of 2.1 feet. What is the depth of the water beneath your keel?