

U.S.C.G. Merchant Marine Exam

Master or Mate Less than 200 Gross Registered Tons

Q343 Chart 12221TR

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

The following questions are to be answered by plotting on chart 12221 TR, Chesapeake Bay, and using the supporting publications.

Each question is completely independent of any other question on this exam.

The following information is applicable to all questions.

(The abbreviation "psc" stands for "per standard magnetic compass".)

VARIATION IS 9° W

DEVIATION TABLE

<i>Magnetic Heading</i>	<i>Deviation</i>
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	1.5°W
300°	0.0°
330°	1.5°E

1. You are on course 135° per standard magnetic compass when you take the following bearings per standard magnetic compass:

Cape Henry Light 266°
Cape Charles Light 353°
Chesapeake Light 124°

What is your position?

- A. LAT 35°57.9'N, LONG 75°50.8'W
- B. LAT 36°57.5'N, LONG 75°50.1'W
- C. LAT 36°57.3'N, LONG 75°50.9'W
- D. LAT 36°57.6'N, LONG 75°51.6'W

Correct answer: C

2. Your GPS position is LAT 36°59.0'N, LONG 75°48.6'W. What is the course per standard magnetic compass to a position one mile east of Cape Charles Lighted Bell Buoy "14" (LAT 37°07.4'N, LONG 75°41.0'W)?
- A. 040°psc
 - B. 053°psc
 - C. 045°psc
 - D. 049°psc

Correct answer: C

3. At 0817 your GPS indicates a position of LAT 37°01.6'N, LONG 75°31.7'W. You are on course 182° per standard magnetic compass at a speed of 9.2 knots. At 0913 your GPS indicates your position at LAT 36°52.3'N, LONG 75°30.8'W. What were the set and drift?
- A. 298°T at 0.7 knot
 - B. 139°T at 1.1 knots
 - C. 121°T at 0.8 knot
 - D. 219°T at 1.1 knots

Correct answer: D

4. You sight Wolf Trap Light in line with New Point Comfort Spit Light "2" bearing 040° per standard magnetic compass. You are on course 319° per standard magnetic compass. Based on this information which of the following is true?
- A. you know the deviation table is incorrect
 - B. you know the compass error is 8°W
 - C. you should apply 3°Easterly deviation to the bearing
 - D. you should suspect the compass may be affected by a local magnetic disturbance

Correct answer: B

5. What do the broken magenta lines (long and short dashes) in and around Mobjack Bay (LAT 37°20'N, LONG 76°22'W) indicate?
- A. fish trap areas
 - B. gunnery exercise areas
 - C. amphibious training areas
 - D. grounds for dredge spoil

Correct answer: A

6. Your 1302 position is LAT 37°14.7'N, LONG 76°22.7'W. You are turning for 9.6 knots. What is your ETA at Trestle C of the Chesapeake Bay Bridge and Tunnel if you follow York River Entrance Channel?
- A. 1516
 - B. 1451
 - C. 1505
 - D. 1500

Correct answer: C

7. You are navigating 1 mile north of Cape Henry Lighthouse at the southern entrance to Chesapeake Bay. You observe that this area is bounded on the chart by magenta bands. This indicates a(n) _____.
- A. explosive anchorage
 - B. pilotage area
 - C. fish trap area
 - D. danger zone

Correct answer: B

8. At 1256 your GPS position is LAT 36°57.0'N, LONG 75°41.0'W. At 1336 your position is LAT 37°07.5'N, LONG 75°39.1'W. What was the speed made good between the fixes?
- A. 18.6 knots
 - B. 15.2 knots
 - C. 16.0 knots
 - D. 14.6 knots

Correct answer: C

9. Which of the following describes the abandoned lighthouse west of Cape Henry Light?
- A. it is a steel skeleton structure
 - B. it is painted black and white
 - C. it is a low mound of rubble
 - D. it is a gray, pyramidal structure

Correct answer: D

10. What is the true heading to steer outbound in Thimble Shoal Channel if your engines are turning for 8.0 knots, the current is 050°T at 1.0 knot and a northerly wind causes 3° of leeway?
- A. 104°T
 - B. 111°T
 - C. 098°T
 - D. 101°T

Correct answer: B