

U.S.C.G. Merchant Marine Exam

Master Less than 100 Gross Registered Tons

Q350 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 12221TR, 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

<u>HDG.MAG.</u>	<u>DEVIATION</u>
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. At 1614 your GPS position is LAT 37°01.6'N, LONG 75°31.7'W. At 1703 your position is LAT 36°57.0'N, LONG 75°41.0'W. What was the course made good between the fixes?
- (A) 250°T
 - (B) 238°T
 - (C) 242°T
 - (D) 247°T

If choice B is selected set score to 1.

2. What are the bottom characteristics of Nautilus Shoal (LAT 37°03'N, LONG 75°56'W)?
- (A) Mud and sand
 - (B) Sand and shells
 - (C) Fine gray sand
 - (D) Hard sand

If choice C is selected set score to 1.

3. Your GPS position is LAT 36°55.2'N, LONG 75°33.1'W. What is the course per standard magnetic compass to Rudee Inlet (LAT 36°49.8'N, LONG 75°58.0'W)?
- (A) 246.0°psc
 - (B) 265.5°psc
 - (C) 261.0°psc
 - (D) 254.5°psc

If choice B is selected set score to 1.

4. You are on course 027° per magnetic compass when you take the following bearings per magnetic compass:

New Point Comfort Spit Light "2" 253°
Horn Harbor Entrance Light HH 282°
Wolf Trap Light 348°

What is the position of the fix?

- (A) LAT 37°19.4'N, LONG 76°09.5'W
- (B) LAT 37°19.7'N, LONG 76°09.9'W
- (C) LAT 37°19.4'N, LONG 76°09.8'W
- (D) LAT 37°19.7'N, LONG 76°10.3'W

If choice B is selected set score to 1.

5. What is the true heading to steer inbound in York River Entrance Channel if your engines are turning for 9.8 knots, the current is 220°T at 1.2 knots, and a northeasterly wind causes 3° of leeway?
- (A) 298°T
 - (B) 315°T
 - (C) 319°T
 - (D) 301°T

If choice C is selected set score to 1.

6. Your 1426 position is LAT 37°10.9'N, LONG 75°29.6'W. You are turning for 9.3 knots. What is your ETA at Chesapeake Light?
- (A) 1626
 - (B) 1633
 - (C) 1616
 - (D) 1621

If choice B is selected set score to 1.

7. You sight Wolf Trap Light in line with New Point Comfort Spit Light "2" bearing 048° per standard magnetic compass. You are on course 203°psc. Based on this information which of the following is true?
- (A) the compass error is 12°W
 - (B) that the deviation table is in error
 - (C) the deviation is 3°E for bearings of 048° per standard magnetic compass
 - (D) the deviation is 9°W

If choice B is selected set score to 1.

8. 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) 219°T at 1.1 knots
 - (B) 298°T at 0.7 knot
 - (C) 121°T at 0.8 knot
 - (D) 139°T at 1.1 knots

If choice A is selected set score to 1.

9. What is the horizontal clearance of the navigation opening of Trestle B of the Chesapeake Bay Bridge and Tunnel?
- (A) 75 feet
 - (B) 70 feet
 - (C) 300 feet
 - (D) 21 feet

If choice B is selected set score to 1.

10. What is the distance from Norfolk to Philadelphia for a deep draft vessel via the Chesapeake Bay and C and D Canal?
- (A) 286 miles
 - (B) 302 miles
 - (C) 209 miles
 - (D) 245 miles

If choice D is selected set score to 1.