U.S.C.G. Merchant Marine Exam

Master/Chief Mate Offshore Supply Vessels

Q205 Chart 12354TR

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. The Light List indicates that a light has a nominal range of 20 miles and is 52 feet high. If the visibility is 12.0 miles and your height of eye is 20 feet, at what approximate distance will you sight the light?

- (A) 21.5 miles
- (B) 20.0 miles
- (C) 13.7 miles
- (D) 12.0 miles

If choice C is selected set score to 1.

2. The following questions are to be answered using Chart 12354 TR, Long Island Sound - Eastern Part, and supporting publications.

You are turning for 12.5 knots and on a course of 255°T.
Your vessel's deep draft is 24 feet. Gyro error is 3°E.
Use 14°W variation where required.

DEVIATION TABLE

Magnetic Heading	**Deviation**
240°	2°W
255°	0°
270°	2°E
285°	4°E

At 2216 your position is LAT 41°16.0'N, LONG 72°08.0'W. Which statement is TRUE?

- (A) Your fathometer reads approximately 40 feet.
- (B) You will cross the Colregs Demarcation Line if you continue on your present course.
- (C) Little Gull Island Light bears 339°T at 4.3 miles.
- (D) You are in the red sector of New London Harbor Light.

If choice D is selected set score to 1.

3. If you estimate 3° leeway due to northerly winds, which course will you steer per standard magnetic compass (psc) to make good 255°T?

- (A) 274°psc
- (B) 270°psc
- (C) 272°psc
- (D) 267°psc

If choice B is selected set score to 1.

4. You sight Bartlett Reef Light in range with New London Harbor Light bearing 038°pgc. At the time of the bearing, the helmsman reports he was heading 253°pgc and 269° per standard magnetic compass. What is the deviation for that heading?

- (A) 1°W
- (B) 1°E
- (C) 4°E
- (D) 4°W

If choice B is selected set score to 1.

5. At 2255 you take the following visual bearings.
Saybrook Breakwater Light 333°pgc
Little Gull Island Light 094°pgc
Horton Point Light 211°pgc

What is your position?

- (A) LAT 41°14.0'N, LONG 72°19.0'W
- (B) LAT 41°13.8'N, LONG 72°19.6'W
- (C) LAT 41°14.2'N, LONG 72°19.7'W
- (D) LAT 41°13.6'N, LONG 72°19.2'W

If choice D is selected set score to 1.

6. At 2308 your position is LAT 41°12.7'N, LONG 72°22.8'W. You steer a course to make good 255°T from this position. At 2310 you receive a distress call from a vessel anchored 2.1 miles due north of Mattituck Inlet Light. If you change course at 2314, what is the course to steer per gyrocompass to arrive at the distress site if you allow 2° leeway for northerly winds, 3°E gyro error and correct your course for a current of 073°T at 1.3 knots?

- (A) 208°pgc
- (B) 212°pgc
- (C) 216°pgc
- (D) 220°pgc

If choice D is selected set score to 1.

7. Based on the information in the previous question, what is your ETA at the distress scene?

- (A) 0016
- (B) 0010
- (C) 0006
- (D) 0021

If choice A is selected set score to 1.

8. At 2347 you are advised that your assistance is no longer needed. At 2350 you change course to make good 268°T.

At 0015 you take the following round of bearings:
Kelsey Point Breakwater light 024°pgc
Horton Point Light 100°pgc Falkner Island Light 333°pgc

At 0030 Falkner Island Lt. bears 000°T at 5.9 miles.

What is the course and speed made good between 0015 and 0030?

- (A) CMG 272°T, SMG 10.8 knots
- (B) CMG 268°T, SMG 10.4 knots
- (C) CMG 262°T, SMG 10.4 knots
- (D) CMG 268°T, SMG 10.8 knots

If choice A is selected set score to 1.

9. At 0030 you alter course and speed to make good 265°T at 10 knots. What is your ETA at a point where Stratford Shoal Middle Ground Light is abeam?

- (A) 0228
- (B) 0223
- (C) 0218
- (D) 0233

If choice D is selected set score to 1.

10. At 0100 you notice that the wind has become SSW'ly and has freshened. At 0200 you sight Stratford Point Lighted Bell Buoy "18" bearing 268°pgc. At 0215 the buoy bears 269°pgc. Which statement is TRUE?

- (A) You should alter course to decrease the distance that you will pass off Middle Ground Shoal.
- (B) You are making more speed over the ground than you estimated.
- (C) You can hold the present course and safely pass buoy "18".
- (D) You should alter course to the right to increase the rate of the bearing change.

If choice A is selected set score to 1.