

## U.S.C.G. Merchant Marine Exam

Master Less than 100 Gross Registered Tons

Q163 Chart 12354TR

(Sample Examination)

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

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

The following information is applicable to all questions.

The following questions should be answered using chart 12354 TR, Long Island Sound, and the supporting publications.

"Per standard magnetic compass" is abbreviated "psc"

"Per gyrocompass" is abbreviated "pgc"

Variation is 14°W

**DEVIATION TABLE**

<b><i>Magnetic Heading</i></b>	<b><i>Deviation</i></b>
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 087° per standard magnetic compass (psc) when you take the following bearings:

Falkner Island Light - 022.0°psc

Horton Point Light - 111.5°psc

Mt. Sinai Breakwater Light - 254.0°psc

What is your position?

- A. LAT 41°06.8'N, LONG 72°40.7'W
- B. LAT 41°10.5'N, LONG 72°40.5'W
- C. LAT 41°07.0'N, LONG 72°44.5'W
- D. LAT 41°13.6'N, LONG 72°46.6'W

Correct answer: A

2. Your engines are making turns for 8 knots, and a northerly wind is causing 3° of leeway. There is a current of 220°T at 1.5 knots. What is the course to steer between Branford Reef Light and Faulkner Island Light?
- A. 102°T
  - B. 084°T
  - C. 095°T
  - D. 108°T

Correct answer: B

3. Your vessel is steady on a heading of 160° per standard magnetic compass when you sight Southwest Ledge Light and New Haven Outer Channel Range Rear Light in line dead astern. What is the deviation of the compass based on this observation?
- A. 2°W
  - B. 2°E
  - C. 5°E
  - D. 5°W

Correct answer: B

4. According to the U.S. Coast Pilot, what is the depth of the channel between State Pier No. 1 and the U.S. Navy Submarine Base in New London Harbor?
- A. 40 feet (12.1 meters)
  - B. 36 feet (10.9 meters)
  - C. 38 feet (11.5 meters)
  - D. 34 feet (10.3 meters)

Correct answer: B

5. NOAA Weather Broadcasts for the New London area may be received by turning your radio to which of the following frequencies?
- A. 162.400 MHz
  - B. 162.550 MHz
  - C. 162.350 MHz
  - D. 162.475 MHz

Correct answer: B

6. At 0829 your position is LAT 41°02.9'N, LONG 72°57.4'W. You are making turns for 8.5 knots. What is your ETA at a position midway between buoys "1" and "2" at the entrance of New Haven Outer Channel?
- A. 0944
  - B. 0938
  - C. 0925
  - D. 0931

Correct answer: A

7. Your present position is LAT 41°05.5'N, LONG 72°38.0'W. Assuming that there is no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position 5 miles due south of Saybrook Breakwater Light?
- A. 077°psc
  - B. 080°psc
  - C. 089°psc
  - D. 066°psc

Correct answer: B

8. You are planning to anchor your vessel at LAT 41°01.1'N, LONG 73°02.8'W. What type of bottom should you expect at this position?
- A. Soft mud
  - B. Hard sand
  - C. Gray mud
  - D. Gray sand

Correct answer: C

9. At 1825 your GPS position is LAT 41°04.9'N, LONG 72°42.1'W. You are on course 085° per standard magnetic compass at a speed of 10 knots. At 1910 your GPS position is 1-mile due south of Twenty-Eight Foot Shoal Lighted Buoy. What were your set and drift?
- A. 051°T at 2.1 knots
  - B. 227°T at 2.5 knots
  - C. 054°T at 2.8 knots
  - D. 233°T at 2.9 knots

Correct answer: C

10. At 1018 your position is LAT 41°14.4'N, LONG 72°07.2'W. At 1036 your vessels position is LAT 41°13.1'N, LONG 72°16.1'W. What was your true course and speed made good?
- A. 245° at 23.1 knots
  - B. 259° at 22.6 knots
  - C. 065° at 25.5 knots
  - D. 079° at 22.8 knots

Correct answer: B