

U.S.C.G. Merchant Marine Exam
Master Uninspected Fishing Vessels
Q185 Navigation Problems – Near Coastal
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions:

1. At 1845 zone time on 24 October, you depart Bimini Island, LAT 25°50.0'N, LONG 77°00.0'W (ZD +5). You are bound for Bishop Rock, LAT 49°40.0'N, LONG 6°34.0'W, and you estimate your speed of advance at 13.6 knots. The distance is 3,491 miles. What is your estimated zone time of arrival at Bishop Rock?
- (A) 0627, 3 November
 - (B) 1642, 3 November
 - (C) 0939, 4 November
 - (D) 1627, 4 November

If choice D is selected set score to 1.

2. You will be loading in Boston Harbor to a maximum draft of 32'06". The charted depth of an obstruction in the channel near Boston Light is 30 feet and you wish to have 3 feet of keel clearance. The steaming time from the pier to the obstruction is 01h 05m. What is the latest time (ZD +4) you can sail on 17 May 1983 and meet these requirements?
- (A) 1610
 - (B) 1728
 - (C) 1821
 - (D) 2350

If choice B is selected set score to 1.

3. You are taking a time tick using the 1930 signal from Rio de Janeiro, Brazil. You hear the preparatory signal "CQ DE PPE" repeated several times followed by a short dash (0.4 sec), 60 dots (0.1 sec each) and another short dash. At the beginning of the last dash, the comparing watch reads 07h 30m 13s. When compared to the chronometer, the comparing watch reads 07h 31m 56s, and the chronometer reads 07h 30m 21s. What is the chronometer error?
- (A) 0m 13s fast
 - (B) 1m 48s slow
 - (C) 1m 43s fast
 - (D) 1m 22s slow

If choice D is selected set score to 1.

4. What will be the velocity of the tidal current at Port Royal, VA, at 1505 DST (ZD +4) on 4 June 1983?
- (A) 0.0 knot
 - (B) 0.1 knot
 - (C) 0.4 knot
 - (D) 0.7 knot

If choice C is selected set score to 1.

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5. The true course between two points is 312° . Your gyrocompass has an error of 3°W . You make an allowance of 4° leeway for a west by south wind. What gyro course should be steered to make the true course good?
- (A) 318°pgc
 - (B) 305°pgc
 - (C) 311°pgc
 - (D) 315°pgc

If choice C is selected set score to 1.

6. Your vessel is proceeding up a channel, and you see a pair of range lights that are in line dead ahead. The chart indicates that the direction of this pair of lights is 283°T , and the variation is 13°E . If the heading of your vessel at the time of the sighting is 278° per standard compass, what is the deviation?
- (A) 5°E
 - (B) 5°W
 - (C) 8°E
 - (D) 8°W

If choice D is selected set score to 1.

7. You swung ship and compared the magnetic compass against the gyrocompass to find deviation. Gyro error is 2°W . The variation is 8°W . Find the deviation on a true heading of 319° .

NP-0115

HEADING	
PSC	PGC
030.5°	$- 024^\circ$
061.5°	$- 054^\circ$
092.0°	$- 084^\circ$
122.5°	$- 114^\circ$
152.0°	$- 144^\circ$
181.0°	$- 174^\circ$
210.0°	$- 204^\circ$
239.5°	$- 234^\circ$
269.0°	$- 264^\circ$
298.0°	$- 294^\circ$
327.5°	$- 324^\circ$
358.5°	$- 354^\circ$

- (A) 0.5°E
- (B) 1.0°W
- (C) 2.5°E
- (D) 2.5°W

If choice C is selected set score to 1.

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8. You depart LAT $49^{\circ}45.0'N$, LONG $06^{\circ}35.0'W$, and steam 3599 miles on course $246.5^{\circ}T$. What is the longitude of your arrival by Mercator sailing?
- (A) LONG $76^{\circ}36.2'W$
 - (B) LONG $78^{\circ}14.0'W$
 - (C) LONG $77^{\circ}02.8'W$
 - (D) LONG $78^{\circ}22.6'W$

If choice C is selected set score to 1.

9. If the pitch of the propeller is 23.2 feet, and the revolutions per day are 94,910, calculate the day's run allowing 11% negative slip.
- (A) 382.0 miles
 - (B) 402.0 miles
 - (C) 322.3 miles
 - (D) 362.3 miles

If choice B is selected set score to 1.

10. You have steamed 803 miles at 13 knots, and consumed 179 tons of fuel. If you have 371 tons of usable fuel remaining, how far can you steam at 16 knots?
- (A) 2581 miles
 - (B) 1099 miles
 - (C) 1833 miles
 - (D) 1374 miles

If choice B is selected set score to 1.