



Suomen Navigaatioliitto ry

Examination in Coastal Navigation 12.4.2019

Tot. points

The points given for each correct answer is marked next to the problem. Maximum points are 30. The limit for passing the examination is 15 points. Use the enclosed chart, tide table and deviation card.

Mark your answers also on this examination form. All calculations should appear on this form or on a separate sheet of paper attached to this form. Answers without calculations are not accepted.

Name, Sos. Sign, Address, Post Office, Phone, Teacher, Examin site, Org. assoc., I order DIPLOMA, CERTIFICATE, e-mail

Completion of EXAMINATION IN INSHORE NAVIGATION

(Place, month and year)

Before you start, read this introduction!

The journey is made with a power driven 12 m long seaworthy vessel. The vessel is equipped with i.e. a standard compass, a fixed spare compass, maritime VHF, GPS, chartplotter and radar.

Weather forecast: Gulf of Finland, southeasterly wind 0-5 m/s. Good visibility. Variation= 6°E.

DEVIATION CARD STANDARD KOMPASS

Table with 3 columns: CC, dev, MC. Rows from 0° to 360°.

1 p

1 p

1 p

1. You are approaching the Hanko harbour on the 19th of August 2004 at 05.00 (a.m.). The draught of your vessel is 1.7 m. The wanted under keel clearance is 0.7 m. The depth in the harbor is 0.4 m according to the chart.

a) What is the height of tide needed for entering the harbour?

ANSWER:

b) What time, at the earliest, is it possible to enter the harbour?

ANSWER:

c) What is the depth of water in the harbour at 14.29 on the same day?

ANSWER:

What happens to the personal information that you give us? An authorized person at the SNL Member Society that receives your examination copies your name and personal ID from the examination form to a withdrawal form. The withdrawal form and the examination form will be sent to the SNL. The SNL archives the hard copy of the withdrawal list. Your examination form will be destroyed safely after one year of the examination.

2. On the 20th of August 2004 at 19.00, your position is 59°40,0'N, 023°30,0'E. What is the direction and speed of the tidal stream in the area, based on the chart?

3 p

ANSWER:

3. Your position is 59°32,0'N, 023°19,0'E. You plan to continue your travel towards the beginning of the 13,0 m fairway to Hanko (59°42,4'N 023°05,7'E) with a speed of 6 knots. All the way, your boat is affected by current. The current's direction is 270° and speed 4 kn.
a) What compass course do you need to steer?

2 p

ANSWER:

b) What is your speed over ground?

1 p

ANSWER:

4. From the position 59°43,0'N 022°37,5'E you are steering a compass course of 209°, and the strengthened southeasterly wind causes a leeway of 10° during the whole voyage.

a) What is your course through water?

1 p

ANSWER:

b) What is the closest distance at which you pass the Bengtskär lighthouse?

1 p

VASTAUS:

c) What is the relative bearing to the lighthouse at the closest passing distance?

1 p

VASTAUS:

5. You are crossing the 13,0 m fairway on the west side of the Porkkala lighthouse. You take a bearing of the Oxhornen leading lines using the spare compass. The compass bearing is 033° . The spare compass shows a steering course of 140° .

a) What is the deviation of the spare compass at the steered course?

2 p

ANSWER:

b) What does the text Racon (O), next to the chart symbol of the Oxhornen lower leading beacon, mean?

1 p

ANSWER:

6. Your dead reckoning position is $59^\circ40,0'N$ $025^\circ19,5'E$. Your compass course is 060° and your speed is 8 knots. At 14.00 the relative bearing to the Juminda lighthouse is 045° to the starboard side, and at 14.30 abeam on starboard side.

What is your position at 14.30?

3 p

ANSWER:

7. Your Dead Reckoning position is $59^\circ53,0'N$ $024^\circ35,0'E$. Your compass course is 226° and your speed is 6 knots. At 15.00 you are observing the Porkkala lighthouse in compass bearing 266° and at 16.00 the same lighthouse in compass bearing 001° . The bearings are taken with the standard compass.

What is your position at 16.00?

3 p

ANSWER:

8.

a) In which situations is a magnetic compass and paper chart better than a chart plotter and an electronic chart?

ANSWER:

1 p

b) How do you measure distance and bearing to a target with radar?

ANSWER:

1 p

c) What does the term **vessel's radio station** mean?

ANSWER:

1 p

9. Check the right alternative:

	Right	Wrong	
a) Warm front occurs when a warmer air mass moves and rises over the colder air.	<input type="checkbox"/>	<input type="checkbox"/>	1 p
b) In the sea area, the strong wind advisory is given when the wind speed is 11-13 m/s.	<input type="checkbox"/>	<input type="checkbox"/>	1 p
c) Long-lasting and thick advection fog can occur when warm and moist air passes over cold sea water.	<input type="checkbox"/>	<input type="checkbox"/>	1 p
d) Finland's territorial waters include its internal territorial waters and territorial sea.	<input type="checkbox"/>	<input type="checkbox"/>	1 p
e) In Finland's territorial waters, a Finnish pleasure boat must fly the national flag.	<input type="checkbox"/>	<input type="checkbox"/>	1 p
f) Border checks cannot in any circumstance be performed on a pleasure boat directly arriving from another Schengen country to Finland.	<input type="checkbox"/>	<input type="checkbox"/>	1 p