

Suomen Navigaatioliitto - Finlands Navigationsförbund



Inshore Skipper Examination 25.4.2025

The maximum points for each question are indicated on the examination form. The total maximum score is 60 points. To pass the exam, a minimum of 30 points must be obtained. In addition, a score of at least 40 % of the maximum points for each part must be achieved, rounded down to the nearest 0.5 points.

Use the attached nautical chart and compass deviation table when applicable. **All answers must be written on the examination form.**

All calculations must be shown either on the examination form or on a separate sheet. **Answers provided without calculations will not be graded.**

Please read this before you begin!

The motor boat used in the exam is 9 meters long, its draught is 1.2 meters, and its height is 4 meters. The boat is equipped with a 200-horse power engine. Its equipment includes a main steering compass (compass deviation table attached) and a hand-held bearing compass, a satellite navigator and an echo sounder. The declination given on the sea chart is 10°E. The questions are independent of each other and can be answered in any order.

When answering, the coordinates are given with 0,1' and angles with 1° accuracy.

Student and Organisation Information

Student name	Personal identity code
Address	
E-mail	
Phone	
Arranging organisation	Teacher
Examination site	

Main Compass Deviation Table

CC	Dev.	MC
0°	-1°	359°
10°	-1°	9°
20°	0°	20°
30°	+1°	31°
40°	+2°	42°
50°	+4°	54°
60°	+4°	64°
70°	+3°	73°
80°	+2°	82°
90°	0°	90°
100°	-1°	99°
110°	-3°	107°
120°	-4°	116°
130°	-6°	124°
140°	-7°	133°
150°	-8°	142°
160°	-8°	152°
170°	-6°	164°
180°	-4°	176°
190°	-3°	187°
200°	-1°	199°
210°	0°	210°
220°	+1°	221°
230°	+3°	233°
240°	+5°	245°
250°	+6°	256°
260°	+8°	268°
270°	+9°	279°
280°	+8°	288°
290°	+6°	296°
300°	+4°	304°
310°	+3°	313°
320°	+2°	322°
330°	+1°	331°
340°	0°	340°
350°	-1°	349°
360°	-1°	359°

Processing of Personal Data

The student's personal data is stored in the Examination Register of Suomen Navigaatioliitto. The personal identity code is stored to identify individuals in accordance with Article 6, Sections 1b and 1f of the European Union's General Data Protection Regulation. Examination forms and their attachments are retained for one year.

Teacher's evaluation

	Part A (min 7.5)	Part B (min 8.5)	Part C (min 7.5)	Result
Points				
Passed (tick)				
Failed (tick)				

Sea chart, compass and aids to navigation - 19 p (minimum 7.5 p)

Question 1

Tot.

You are at the beginning of the 4.5m fairway ($63^{\circ}57.3'N$ $25^{\circ}45.0'E$) and are steering towards position $63^{\circ}54.8'N$ $25^{\circ}37.5'E$.

a) What is your true heading?

2 p

ANSWER:

b) What is your compass heading to steer?

2 p

ANSWER:

c) What is the true bearing to the Norrbådan beacon when passing it and you see the beacon directly on your side?

2 p

ANSWER:

d) What is the compass bearing with a hand-held compass to the Norrbådan beacon when passing it and you see the beacon directly on your side?

2 p

ANSWER:

Question 2

Tot.

3 p

What is the meaning of the following sea chart symbols:

----- (1,8) ----- ANSWER:

 ANSWER:



ANSWER:

Question 3**2 p**

Tot.

Your nautical chart includes a marking as shown in the image below. The Finnish Meteorological Institute provides two reference values for sea level at the nearest measurement point in the maritime area you are located: mean water -50 cm and N2000 -30 cm. How deep below the sea surface is an underwater rock, for which your chart indicates a depth of 1.2 meters?

WGS 84 (EUREF-FIN) BSCD (N₂₀₀₀) IALA A**ANSWER:****Question 4****2 p**

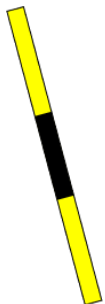
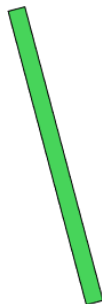
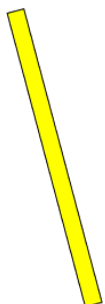
Tot.

You are planning to lay anchor at Gammelbybukten. What is the sea bottom quality there?

ANSWER:**Question 5****4 p**

Tot.

What are the following navigational buoys:

**ANSWER:****ANSWER:****ANSWER:**

Which side should the buoy above be left on? Justify your answer.

ANSWER:

Section B - Route planning and navigation - 22 p (minimum 8.5 p)

Question 6

Tot.

At 13:25 you are at $63^{\circ}54.2'N$, $25^{\circ}59.1'E$ and your plan is to navigate along the trade fairway in the northwestern direction.

a) At what time will the Yksikivi ice buoy be directly on your side if you maintain a speed of 8 knots? **3 p**

ANSWER:

b) On the sea chart you can see that there is something in the middle of the fairway to the east of Laitakari. What is it, and should it be taken into account? Explain. **1 p**

ANSWER:

c) On the west side of Laitakari there is the Laitakari sector beacon. Is this navigational aid important on this trip? Explain. **2 p**

ANSWER:

Question 7

Tot.

At 14:15 you are at position $63^{\circ}52.0'N$ $25^{\circ}38.0'E$ and you are sailing directly towards north.

a) What is the distance travelled when your satellite navigator shows your latitude to be $63^{\circ}54.3'N$? **2 p**

ANSWER:

b) Your boat speed is 7 knots. What time will you be at the location indicated above. **2 p**

ANSWER:

Question 8**4 p**

Tot.

You are in the Vilniemi marina. You are planning to make a trip to Viira and you want to meet the 5.2 m fairway heading northwest to continue your journey. The wind is light and the sun is shining.

1. Plan a safe and appropriate route from the west side of Laitakari to the 5.2 m fairway. Draw it clearly on the examination sea chart.
2. Mark the relevant objects on the chart: danger spots near the route, and objects that you plan to use to navigate safely on the planned route.
3. If necessary, draw safety boundaries, bearing lines to support steering, and turning points.
4. Indicate with markings on the chart or a description how you determine that you are at the turning points on your route.
5. If you plan to use a compass, show the compass headings and bearings, and the respective compass correction calculations.
6. If you plan to use an echo sounder, indicate the relevant depth points on the map.
7. You can present your compass correction calculations and other observations in a concise form on a separate sheet of paper.

Question 9**4 p**

Tot.

You are located 1.5 M from the Norrbådan beacon on true bearing of 294° and you want to reach the 5.2 m fairway heading southeast. The wind is light and the sun is shining.

1. Plan a safe and appropriate route for the 5.2 m fairway. Draw it clearly on the examination sea chart.
2. Mark the relevant objects on the chart: danger spots near the route, and objects that you plan to use to navigate safely on the planned route.
3. If necessary, draw safety boundaries, bearing lines to support steering, and turning points.
4. Indicate with markings on the chart or a description how you determine that you are at the turning points on your route.
5. If you plan to use a compass, show the compass headings and bearings, and the respective compass correction calculations.
6. If you plan to use an echo sounder, indicate the relevant depth points on the map.
7. You can present your compass correction calculations and other observations in a concise form on a separate sheet of paper.

Question 10

Tot.

You are located on the west side of Lappören and you are steering with the exam boat towards north. You notice a ship approaching from the northwest with a clearly visible day mark as shown in the picture.

a) What kind of ship is it?

1 p

ANSWER:



b) What are your actions to make?
Justify your answer.

3 p

ANSWER:

Section C - Rules of the waterways - 19 p (minimum 7.5 p)

Question 11

Tot.



a) What is the meaning of the water traffic sign above?

2 p

ANSWER:



b) What is the meaning of the water traffic sign below?

2 p

ANSWER:

Question 12

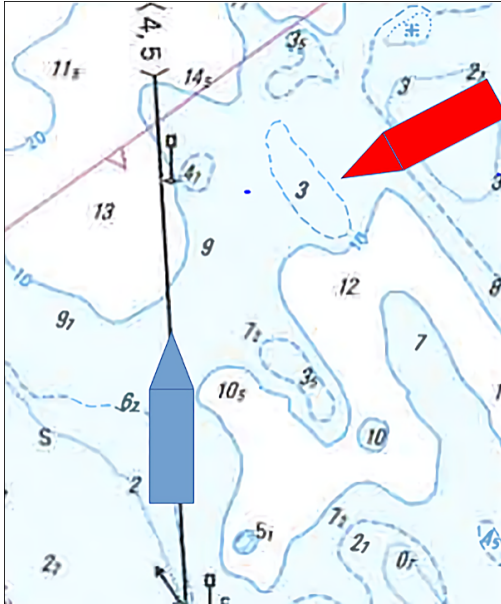
Tot.

You are navigating along the fairway in a northerly direction as shown in the figure below. You notice another motorboat approaching from the northeast and that you may be on a colliding course.

a) Which of the boats is required to give way and why?

2 p

ANSWER:



b) How should the giving of way be carried out, i.e. what shall the boat obliged to give way do, and what shall the boat not obliged to give way do?

2 p

ANSWER:

Question 13

Tot.

a) You are sailing a sailboat under sail and decide to start the engine while keeping the sails up, to make it easier to get through a narrow strait. What should you also do in this situation?

2 p

ANSWER:

b) You have anchored the examination boat off the fairway area, but in a place where there may be other water traffic. How do you indicate during the daytime that you are at anchor?

2 p

ANSWER:

Question 14**4 p**

Tot.

Name four ways of signaling, according to the international rules of the sea, that the examination boat is in distress and needs assistance.

ANSWER:**Question 15****3 p**

Tot.

Which of the following statements are correct and which are incorrect?

Tick the right box.

True False

a) You may attach your mooring line to a navigation buoy for a short time when fishing.

☐ ☐

b) If a customs officer shows a STOP sign, you must stop your boat.

☐ ☐

c) You may empty your septic tank into the sea in the outer archipelago.

☐ ☐

d) When a boat is underway, it is sufficient for watchkeeping to look ahead and to the sides.

☐ ☐

e) Onboard the examination boat described in the introduction, the skipper must be a person over 15 years of age.

☐ ☐

f) The limit for warning for near gale-force/gale-force winds: (in Finnish “kovan tuulen varoitus”) in weather reports is 18 m/s.

☐ ☐