

Suomen Navigaatioliitto - Finlands Navigationsförbund



Inshore Skipper Examination - December 13, 2024

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. **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 8.0)	Part C (min 8.0)	Result
Points				
Passed (tick)				
Failed (tick)				

Part A - Sea Chart, Compass and Navigational Aids 19 pts (minimum passing score: 7.5 pts)

Question 1

Tot.

You are at position 63°54.8'N 25°38.2'E. You want to navigate to the northern endpoint of the southbound fairway with a nominal depth of 4.5 m.

a) What is the course to steer according to the map?

2 p

ANSWER:

b) What is the compass course?

2 p

ANSWER:

c) What is your position (lat/lon) when you reach the northern endpoint of the fairway?

1 p

ANSWER:

Question 2

2 p

Tot.

You are at the northernmost end of the southbound fairway with a nominal depth of 4.5 m. What is the compass bearing to Viira lighthouse, measured with a hand-held bearing compass?

ANSWER:

Question 3

Tot.

At 14:35 you are at the fairway crossing of the 4,5 m and 3,0 m fairways on the east side of Öland and you continue along the fairways towards the southwest.

a) How long is your trip to the place where the southernmost tip of Lappören is directly on your right side?

3 p

ANSWER:

b) What is your travel time with a average speed of 7 knots?

2 p

ANSWER:

c) What is the time when you see the southernmost tip of Lappören directly on your side?

1 p

ANSWER:

Question 4

Tot.

You steer along a fairway, and you see the following symbol on the map.

a) What is the colour of this sea mark?

2 p

ANSWER:



b) On which side should you pass it? Why?

2 p

ANSWER:

Question 5

2 p

Tot.

Where can you find information on updates to sea charts that were made after the charts were printed?

ANSWER:

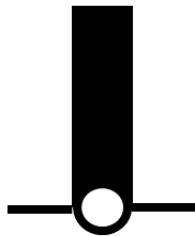
Part B Route Planning and Boating 20 pts (minimum passing score: 8.0 pts)

Question 6

3 p

Tot.

Tick the correct answers.



Questions a to c are related to the map extract on the left and parts d to f to the map symbol on the right. There are two correct statements in total: one per image.

- ☐ a) All rocks within the 3.0-meter depth contour are plotted on the map.
- ☐ b) A rock lies in the exact position marked on the map.
- ☐ c) Inside the 3.0-meter depth contour the water depth is three meters or less (measured from the reference datum). Some deeper spots may occur due to incomplete sounding coverage.
- ☐ d) A line beacon is visible from all directions.
- ☐ e) Two line beacons indicate the fairway direction on a given leg of the fairway.
- ☐ f) When you see two line beacons in line, you can always steer safely towards them.

Question 7

Tot.

True or false?

True False **3 p**

Tick the correct box.

- | | | |
|--|--------------------------|--------------------------|
| a) The fuel consumption rate depends on the travelled distance only. | <input type="checkbox"/> | <input type="checkbox"/> |
| b) The course direction information indicated on a satellite navigator is your course on the map. | <input type="checkbox"/> | <input type="checkbox"/> |
| c) When planning alternative routes you should consider the weather conditions. | <input type="checkbox"/> | <input type="checkbox"/> |
| d) The clearance height of a bridge indicated on the chart is constant and does not change due to environmental conditions. | <input type="checkbox"/> | <input type="checkbox"/> |
| e) You can always rely on the satellite navigator position fix shown on an electronic chart plotter. | <input type="checkbox"/> | <input type="checkbox"/> |
| f) You should inform your close ones about the planned route and estimated arrival time before setting off or if the plan changes. | <input type="checkbox"/> | <input type="checkbox"/> |

Question 8

8 p

Tot.

Your plan is to navigate from Vilniemi harbour to Gammelby harbour for the night. The wind is light, and it is sunny.

1. Plan a safe and appropriate route. Draw it clearly on the examination sea chart.
2. Mark on the map all the important features along your route: hazards and beacons or other features to aid you in navigating the route.
3. When needed, draw safety lines, navigation lines and turning points.
4. Indicate with markings or an explanation of how you know you are at the turning points of your route.
5. If you use the compass, specify the compass courses and bearings, along with the calculations for these.
6. If you use the echo sounder, mark on the map the soundings you plan to use.
7. You can use a separate paper for your remarks on the route and compass calculations.

Question 9

Tot.

8. You are 0.5 NM north of Norrbådan and your plan is to anchor between Sälgrund and Lillören (63°51.6'N, 25°44.3'E). The western wind is rising.

a) What is your position (lat/lon)?

2 p**ANSWER:**

b) What is the distance for the shortest route that can be taken with the exam boat to the destination?

1 p**ANSWER:**

c) What is the distance if the journey is made via the 4.5-meter and 3.0-meter fairways?

1 p**ANSWER:**

d) Why should you, in this instance, choose the longer route?

2 p**ANSWER:****Part C - Rules of the Waterways 21 pts (minimum passing score: 8.0 pts)****Question 10**

Tot.

a) What is a safe harbour, and in what kind of situation might you need one?

2 p**ANSWER:**

b) List two different sources for obtaining the latest weather forecast for mariners.

2 p**ANSWER:**

Question 11

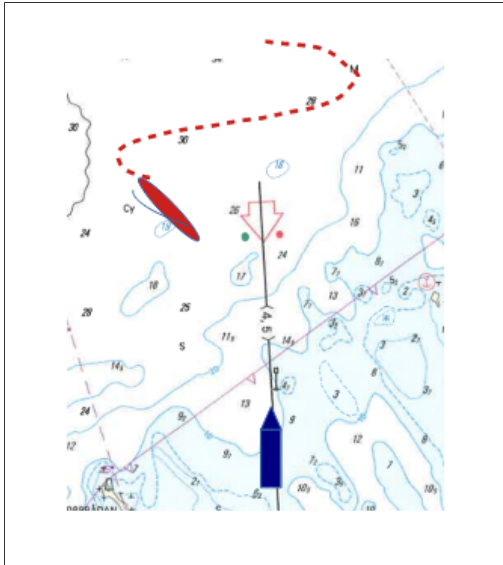
Tot.

You are navigating along the fairway as shown in the figure. You notice a sailing boat approaching you from the opposite direction and that you might risk collision.

a) Who should give way and why?

2 p

ANSWER:



b) How should it be done: what should the one obligated to steer out of the way do, and what does the one not obliged to give way do?

2 p

ANSWER:

Question 12

Tot.



a) What is the meaning of the traffic sign at the top?

2 p

ANSWER:



b) What is the meaning of the traffic sign at the bottom?

2 p

ANSWER:

Question 13

Tot.

Which equipment is mandatory on the exam boat according to the Water Traffic Act?

True

False

6 p

Tick the correct box.

a) Life vests for everyone onboard.

☐☐

b) Oars, paddle or anchor with a rope.

☐☐

c) A fire extinguisher.

☐☐

d) A bilge pump or some other device for removing water from the boat.

☐☐

e) An up-to-date sea chart, if your planned trip requires route planning.

☐☐

f) Red rocket flares.

☐☐**Question 14**

Tot.

True or false?

True

False

3 p

Tick the correct box.

a) The watchkeeping at sea must be continuous and be based on visual and audible observations.

☐☐

b) If the skipper's blood alcohol level is below 0.1%, they're not guilty of boating while intoxicated.

☐☐

c) The overtaking vessel must always give way to the vessel being overtaken.

☐☐

d) It is always allowed to land at a naval protected area.

☐☐

e) Every boat has a designated master or skipper.

☐☐

f) The limit for gale warning in Finland is 14 m/s.

☐☐