



Suomen Navigaatioliitto ry

EXAMINATION IN INSHORE NAVIGATION 9.12.2016

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 and deviation card.

All answers should also be marked to this examination form.

All calculations must be visible on this examination form or on a separate paper that has to be enclosed this form. Answers without calculations are not acceptable.

Name _____

Teacher _____

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Examin. site _____

Address _____

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I order DIPLOMA CERTIFICATE

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Before you start, read this introduction!

The vessel used is a 13 m long power-driven vessel. The draught is 1.2 m and the height is 4 m. The vessel is equipped with a standard compass (the deviation card below), a fixed spare compass, log and an echo sounder. Variation= 7° E for the examination chart. The problems are not connected to each other and may be solved in random order.

DEVIATION CARD STANDARD COMPASS

1. a) You are starting on a boat trip, using the examination vessel. What basic safety equipment is mandatory in the vessel, according to the water traffic regulations?

ANSWER:

1p

b) You find a sea chart in the boat. The compass rose is marked with 5°45'E 2004 (6' E).

What is the variation for the chart in the year 2016?

1p

ANSWER:

CC	dev	CM
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°

2. At 11.15 you are in the position $63^{\circ}56,2'N$ $025^{\circ}37,2'E$. From here you steer 2,5 M with 6 knots speed and CC 080° , after that you steer CC 057° for 2,1 M with the speed unchanged.

What are the coordinates of your arrival position and at what time are you there?

2p

3. You are in the beginning point of the 3,0 m fairway so, that the isolated danger mark is abeam on port side. You steer along the fairways with a speed of 6.5 knots. At what time should you start, in order to be in the position where the relative bearing to the beacon tower Norrbådan is (RB) 235° at 15.15 hrs?

3p

ANSWER:

4. a) You are in the northern end of the 4,5 m fairway ($63^{\circ}57,2'N$ $025^{\circ}44,9'E$). You want to check the deviation of your spare compass. You steer straight towards the leading marks at Skogböle. Your compass course according to the spare compass is 164° . What is the deviation of the spare compass at this course?

1p

ANSWER:

b) To which ships, according to the International Regulations for Preventing Collisions at Sea, shall a sailing vessel give way?

1,5p

ANSWER:

5. a) When is a vessel under way?

ANSWER:

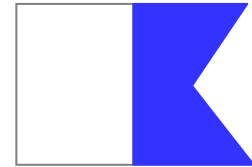
1,5p

b) You see a ship from which the following flag signal is visible.

What ship is in question?

What is to be taken into consideration when you approach the ship?

ANSWER:



1p

c) What does the marking Fl(4)W.45s36m 17M next to the Norrudd lighthouse mean?

ANSWER:

1p

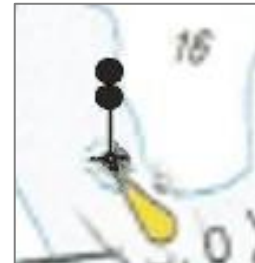
6. a) What are the characteristics of light of a lighted East mark and what reflectors is it equipped with, listed from the top?

ANSWER:

1p

b) What are the characteristics of light and the reflector colors of the seamark aside?

ANSWER:



1p

7. a) You are in the sea area north of Lappören. To determine the position of the vessel you use a hand held bearing compass. The compass bearing to the lighthouse Viira is BC 091° and to the beacon tower Norrbådan BC 147°. What is your position?

2p

ANSWER:

b) Is there anything that has to be taken into consideration with the positioning?

ANSWER:

1p

8. You are anchoring south of Laitakari at 63°54,8'N 025°57,6'E. You need fuel and decide to drive to the guest harbor (63°53,3'N 025°45,3'E) located at Öland. **Draw the route plan on the examination chart** by **marking the leading lines, turning points and necessary safety borders** that you will be using for a safe navigation. **Check (x) the hazard objects** you have to take into consideration as you navigate!

4p

9. a) What is the purpose of the International Regulations for Preventing Collisions at Sea?
ANSWER:

2p

b) Tell 4 international distress signals.
ANSWER:

2p

10. Check the right or wrong alternative:

	Right	Wrong	
a) Using of navigation lights is forbidden in good visibility	<input type="checkbox"/>	<input type="checkbox"/>	1p
b) The color of light on a lighted special mark is white	<input type="checkbox"/>	<input type="checkbox"/>	1p
c) An over 50m long motor vessel at anchor uses two balls as its day shape	<input type="checkbox"/>	<input type="checkbox"/>	1p
d) The limit of intoxication in pleasure boat traffic, caused by consumption of alcohol is 1,2 per mille	<input type="checkbox"/>	<input type="checkbox"/>	1p