



Suomen Navigaatioliitto ry

EXAMINATION IN INSHORE NAVIGATION 21.4.2017

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 _____

Soc.Sign _____

Examin. site _____

Address _____

Org. Assoc _____

Post Office _____

I order DIPLOMA CERTIFICATE

Phone _____

E-mail: _____

Before you start, read this introduction!

The vessel used is a 13 m long inboard driven motor boat. 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

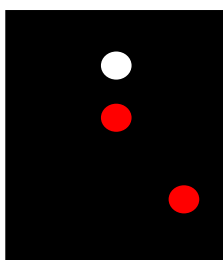
1. You are northwest of Öland. To determine the position of the vessel you use a hand held bearing compass. The compass bearing to the lighthouse Norrudd is BC 142° and to the beacon tower Norrbådan BC 088°. What is your position?

3p

ANSWER:

2. a) In the dark you see a vessel on which the following lights are visible. What type of vessel is in question?

ANSWER:



1p

b) What does the sound signal two (2) short blasts mean?

ANSWER:

1p

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°

3. a) You have determined your position using bow and beam bearings. The position is a point 4.2 M in true bearing 333° from the lighthouse Norrudd. What are the coordinates of your determined position?

ANSWER:

1,5p

b) From the position in problem a) you steer CC 078° . Which are the coordinates of the point of arrival, when the relative bearing to the beacon tower Norrbådan is 139° ?

1,5p

ANSWER:

4. Your position is $63^\circ 54,2'N$ $025^\circ 35,5'E$. You want to check the deviation of your spare compass. You steer straight towards the beacon tower Norrudd. Your compass course according to the spare compass is 094° . What is the deviation of the spare compass at this course?

2p

ANSWER:

5. What is the mandatory basic equipment onboard the registered examination boat?

Circle the right alternative/alternatives!

(right alternative + 0,5p wrong alternative - 0,5p however not less than 0p totally)

Compass	Hand bailer	Fenders
Emergency rocket flares	Oars or paddle or anchor with rope	Pocket light
Binocular	Fire extinguisher	Life vest
Sound signal equipment	GSM Phone	Mooring ropes

2p

6. At 10:30 you are in the fairway in position $63^{\circ}57,8'N$ $025^{\circ}55,0'E$. You steer in the fairway to southeast and the speed is 6.5 knots. From the fairway crossing you steer on to the 5.2 m fairway to northwest.

At what time is the second port hand mark abeam?

2p

ANSWER:

7. a) Mention three of the boat master's responsibilities, according to the Finnish Maritime Code, considering pleasure boating?

ANSWER:

1.

2.

3.

b) Two power driven ships are approaching head on. Which one has to give way and how is it performed?

ANSWER:

1,5p

1,5p

8. You are anchoring east of Skomakaren at $63^{\circ}51,3'N$ $025^{\circ}41,2'E$. You plan to drive to the Bomarsund harbor ($63^{\circ}53,25'N$ $025^{\circ}48,9'E$) for the night. **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 are the characteristics of a lighted safe water mark and what reflectors is it equipped with, listed from the top?

ANSWER:

1p

b) What is the meaning of the sea traffic mark aside?

ANSWER:



1p

c) What day shape does a skip moving with its stern forward show according to the Inland Waterway Rules?

ANSWER:

1p

d) Mention four (4) distress signals, according to the International Regulations for Preventing Collisions at Sea!

ANSWER:

1.

2.

3.

4.

2p

10. Check the right or wrong alternative:

	Right	Wrong	
a) The reflectors of the green lateral spar buoy is green up and green down	<input type="checkbox"/>	<input type="checkbox"/>	1p
b) The ships starboard light is red	<input type="checkbox"/>	<input type="checkbox"/>	1p
c) A new and functional chart plotter can replace paper sea charts on board a pleasure boat	<input type="checkbox"/>	<input type="checkbox"/>	1p
d) A motor vessel will always give way for sailing ships	<input type="checkbox"/>	<input type="checkbox"/>	1p