

FUNCTION		NAVIGATION				
LEVEL		OPERATIONAL				
№	Question	Answer (a)	Answer (b)	Answer (c)	Answer (d)	Correct answer
2	3	4	5	6	7	8
1	A ship must be equipped with:	charts covering all the world	an identical set of charts accepted for all ships covering identical route	charts covering the planned route and all ports at which the vessel may call	charts in compliance with the area for navigation	3
2	Main circles of the first celestial equator coordinate system are	the local meridian and the true horizon	the local meridian and the celestial equator	the hour circle of vernal equinox and the celestial equator	the true meridian and the true horizon	2
3	Main circles of the second celestial equator coordinate system are	the local meridian and the true horizon	the local meridian and the celestial equator	the hour circle of vernal equinox and the celestial equator	the true meridian and the true horizon	3
4	Altitude of the celestial body is the angle	in the centre of the celestial sphere between the plane of equator and the direction to the celestial body	in the centre of the celestial sphere between the plane of true meridian and the direction to the celestial body	in the centre of the celestial sphere equal to 90° minus the angle measured between the plane of the equator and the direction to the celestial body	in the centre of the celestial sphere between the plane of true horizon and the direction to the celestial body	4

5	Meridian angle is	an angle from 0° to 180°	an angle from 0° to 90°	an angle from 180° to 360°	an angle from 0° to 360°	1
6	The complement of declination to 90° ($90^\circ - \delta$) is known as	sidereal hour angle	polar distance	zenith distance	parallax	2
7	Apparent sunrise is position of the Sun when	the lower end of the Sun is tangential to the horizon	the lower end of the Sun is at a distance of 2/3 from its diameter above the horizon	the upper end of the Sun touches the horizon	the centre of the Sun is on the line of the horizon	3
8	True sunrise is position of the Sun when	the lower end of the Sun is tangential to the horizon	the lower end of the Sun is at a distance of 2/3 from its diameter above the horizon	the upper end of the Sun touches the horizon	the centre of the Sun is on the line of horizon	2
9	The apparent diurnal motion of celestial bodies is performed over	verticals	parallels	meridians	celestial equator	2
10	The Moon revolves around the Earth in	approximately 18 days	half a year	a year	approximately a month	4
11	The altitude of a celestial body alters the most slowly if	the celestial body is rising	the celestial body is on the prime vertical	the celestial body is in culmination	the celestial body sets	3

12	The azimuth of a celestial body alters the most quickly if	the celestial body is rising	the celestial body is on the prime vertical	the celestial body is in culmination	the celestial body sets	3
13	The main circles of the horizon coordinate system are	the local meridian and the true horizon	the local meridian and the celestial equator	the hour circle of vernal equinox and the celestial equator	the true meridian and the true horizon	4
14	Relation between the ship's time and GMT	$T_{ship} = GMT + Ne$	$T_{ship} = GMT + Ch.Corr.$	$T_{sh} = GMT \pm N(E/W)$	$GMT = T_{ship} + Ne$	3
15	Local mean time is measured from	local meridian	Greenwich meridian	hour circle of vernal equinox	any meridian	1
16	All observers positioned at the same meridian	have the same local time	have different local times	have the same local time if they are in the same hemisphere	have different GMTs	1
17	Ship's time is the time	at Greenwich meridian	at the meridian of the port of destination	at the meridian of the port of departure	at the time zone applied to the clocks on board	4
18	The change of ship's time	is entered in the deck log book	is not entered	is entered in the chronometer rate book	is entered in the engine log book	1

19	The instrument error of the sextant	is extracted from the passport of sextant	is measured on board	does not exist	is not applied	1
20	The celestial globe is oriented according to	the sidereal time and the geographic latitude	the local hour angle and the declination of the celestial body	GMT and sidereal hour angle	the ship's time and the longitude	1
21	Entering arguments in the Nautical Almanacs are	the date and the ship's time	the date and the GMT	the date and the zone time	only the GMT	2
22	On the celestial globe are plotted	all possible stars	navigational stars and planets without parallax	stars, planets, sun and moon	the most lucent stars	4
23	To determine the exact correction of the compass it is necessary that	the altitude of the celestial body be less than 25°-30°	the altitude of the celestial body be not less than 30° / the minimal altitude of luminarity be 30°	the altitude of the celestial body be not less than 45° / the minimal altitude of luminarity be 45°	the altitude of the celestial body be higher than 60°	1
24	Astronomical determination of compass correction is not affected by	errors in latitude and longitude up to 30 n.m.	error in longitude up to 50 n.m.	the altitude of celestial body above 30°	errors in latitude and longitude up to 1 n.m.	1
25	On charts using mercator projection, rhumb line is	a sector of circle	straight line	sector of hyperbola	sector of ellipse	2

26	The use of ECDIS is reglamented by IMO as	mandatory	being under clarification	advisable	mandatory for ships carrying dangerous goods	1
27	More detailed navigational information is provided by	large-scale charts	small-scale charts	geographic maps	topographic charts	1
28	Nautical charts and publications must be corrected with all applicable corrections on board	for all areas	for the area covering the route	according to the requirements of the company	it is not obligatory	2
29	A ship is sailing eastward and on 25 January at 0900 zone time crosses the international date line on easterly course. What is the date and GMT when the ship crosses the international date line?	0900, 24 January	2100, 24 January	2100, 25 January	0900, 26 January	2
30	Lines on chart connecting points with equal magnetic declination are called	magnetic longitudes	magnetic declinations	variation	isogonal lines	4
31	What is the length of a nautical mile?	1,800 m	2,000 yards	6,086 feet	528,0 inches	3
32	Navigating officer on board on geographic longitude 165° E observes the Sun at 14:25:04 zone time on 21 September. What is the GMT and what is the date in Greenwich at the moment of observation?	03 h. 25 m. 04 s., 21 September	02 h. 25 m. 04 s., 21 September	01 h. 25 m. 04 s., 21 September	01 h. 25 m. 04 s., 20 September	1

33	You are on board of a ship at 0400 zone time on 3 July and you are in 8 east zone. What is the GMT?	12.00, 3 July	20.00, 3 July	12.00, 2 July	20.00, 2 July	4
34	Parameters of orthodrome are	vertex and initial course	the longitude of the cross point of orthodrome and equator and the angle measured between the meridian and the orthodrome in this point	the longitude of the cross point of orthodrome and equator and coordinates of vertices	orthodromic courses and coordinates of initial and end point	2
35	Vertices of orthodrome are	points where the orthodrome crosses the equator	points in which the ship changes her course	points in which the geographic latitude is maximal	points in which the difference between longitudes is 90°	3
36	Orthodromic correction is	the angle between the orthodrome and rhumb line crossed at one point	the difference in distances between two points on orthodrome or on rhumb line	the difference between the rhumb line and the ship's course in a point	the angle between the orthodrome and the meridian crossing it in each one point	1
37	On Mercator projection chart rhumb line and orthodrome appear as	two straight lines, distinguished by the direction with angle equal to the rhumb line correction	spiral and arc of a circle	straight line and arc of a circle	straight line and dotted line	3
38	On Gnomonic projection charts orthodrome appears as	arc of a circle	spiral directed to the pole	straight line or arc of a circle depending on the scale of the chart	straight line	4
39	The length of orthodrome is calculated using the equation $D = D1 + D2$, D1 and D2 are distances from the initial and the end point of the route to the vertex. How are the initial and the end point on the earth situated?	on both sides of the equator	on one side of the equator and on both sides of the vertex	between the equator and the vertex	on both sides of the vertex	2

40	The length of orthodrome is calculated using the equation $D = D_1 - D_2$ D_1 and D_2 are distances from the initial and the end point of the route to the vertex. How are the initial and the end point on the earth situated?	on both sides of the equator	on the one side of the equator and on both sides of the vertex	between the equator and the vertex	on both sides of the vertex	3
41	During passage the passage plan has to be	in the master's cabin	on the bridge	in the office of the agent	in the office of the ship operator	2
42	Planned observations in restricted or coastal waters must provide fix positioning	with accuracy not less than 4 cab	with accuracy recommended by the navigation officer	with maximal accuracy	with accuracy according to the company procedures	3
43	Planned observations in open sea must provide fix positioning	with accuracy 4% of the distance to the nearest danger with a maximum of 4 n.m.	with accuracy 6% of the distance to the nearest danger with a maximum of 2 n.m.	20 cab	100 m	1
44	The evaluation of visual and radar range from floating aids of navigation in the process of voyage planning is	mandatory	not necessary	according to the decision of the Navigating Officer	according to the company	1
45	In passage planning which methods of fixing the ship's position must be used?	Only the method providing the highest accuracy during the passage	Different methods	Independent of visibility	GPS	1
46	Passage planning is developed and executed	from disembarkation of the pilot in the departure port to the boarding of the pilot in the destination port	from the roadstead of the departure port to the roadstead of the destination port	from the berth of the departure port to the berth of the destination port	according to the local regulations	3

47	The supply of charts and nautical publications before the passage is	mandatory	performed according to the master's judgement	advisable	performed according to the company requirements	4
48	The correction of nautical charts is performed	only on board the ship by the Chief Officer	by the publisher	only in specialized offices	on the ship and in specialized offices	4
49	What is the meaning of isoline?	line at each point of which the observer measures equal navigation parameters	line connecting the ship's position and the observed object	the track history on one and the same course	line of one and the same form over the terrestrial globe	1
50	The errors in the measurement of navigational parameters are	constant and periodic	positive and negative	serious, systematic and random errors	increasing and decreasing errors	3
51	On 04.04.2001 at 23:56 your geographic longitude is 179°59' W. In 8 minutes your geographic longitude has already become 179°59' E? What is the local time and what is the date ?	00:04 on 04.04.2001	00:04 on 05.04.2001	00:04 on 06.04.2001	00:04 on 03.04.2001	3
52	In great-circle sailing you cross the equator at a point with longitude $\lambda=125^{\circ}W$. Theoretically the equator is crossed by the great circle at another point with longitude $\lambda=?$	$\lambda = 125^{\circ}E$	$\lambda = 25^{\circ}E$	$\lambda = 55^{\circ}W$	$\lambda = 55^{\circ}E$	4
53	The implementation of ECDIS in navigation is	mandatory according to the IMO requirements	not mandatory	recommended for navigation in narrow waters	IMO is not concerned about that	1

54	What kind of charts are used in navigation?	tourist maps	Mercator charts	geographical maps	political and economic maps	2
55	The weekly notices to mariners give information about correction of:	only the navigational books	only the navigational charts	the navigational books and charts	facsimile maps	3
56	On board must be received and stored:	monthly Notices to Mariners	annual and weekly notices to mariners	semi-yearly notices to mariners	their receipt is not necessary	2
57	Notices to mariners received on board are kept for a period of:	3 years	5 years	2 years	according to company's ISM procedure	4
58	Where are the navigation charts corrections entered according to the notices to mariners?	in the logbook	only in the catalog of charts	in the lower left corner of the chart and the corrections log	in the register log of notices	3
59	To facilitate corrections some of the notices to mariners shall be accompanied by:	pictograms	tracings for charts	labels	pilots charts receipts	2
60	If the notice to mariners is accompanied by "Block for Chart №..." :	it adheres as a correction to the corresponding chart	it is attached to the charts catalog	it is recorded in the logbook	it is attached to the documents of the voyage	1

61	What means the letter "T" after the number of Notice to Mariners?	constant notice	temporary notice	prior notice	notice of cargo ships	2
62	Where are symbols and abbreviations for correcting the navigational charts specified?	in ISM Code	in chart educational aids	pilot books for the region	in the chart publisher guide	4
63	To whom is the correction of charts and books assigned ?	watchkeeping officer	navigation officer released from other duties	only the master	deck trainee	2
64	Which charts and books are necessary to be corrected prior to sailing?	all available on board	relating to the area in which the ship is located	relating to the area of the oncoming voyage	only those containing plans of the next ports of call	1
65	Responsibility for the consequences caused by shore office corrections of the navigation charts and books will be borne by	the watchkeeping officer	the chief officer	the shore office	the master of the vessel	3
66	When can the navigation officer make corrections to the navigation charts and books?	during a watch	only during the stay of a vessel	when relieved of watch	off working time	3
67	When is correcting of all navigation charts and books on board the ship required?	upon request of the PSC	upon instruction of the ship's agent	as per the ISM Code procedures of the company	upon getting the ship under repair	3

68	Who performs an overall correction of all navigation charts and books as per ISM Code procedures?	specialized office	watchkeeping officer awaiting the ship	relieved of duty crewmembers, optional	Maritime Administration	3
69	At which latitudes the nautical mile has the least value?	At the poles	At the equator	At the tropics	At average latitudes	2
70	Admiralty chart number is located:	within the inner frame of the chart	outside the outer frame of the chart	between the outer and inner frame of the chart	in the upper right corner of the chart	2
71	Navigational charts are used by	exclusively by the master	authorized persons on board	the entire crew	only the watchkeeping officer	4
72	What navigational charts is the ship equipped with?	Charts to sail all around the world	a set of charts, which is the same for all ships of the same class	a set of charts which is the same for all ships sailing in a given area	charts providing destination and possible deviation	4
73	Approval of the list of navigational charts and publications for the coming voyage is done by:	quartermaster of the ship	Navigation officer who is assigned responsible for the property	chief officer of the ship	master of the vessel	4
74	What does the abbreviation ENC mean?	sound system of the ship	buoyage system	raster navigational chart	vector navigational chart	4

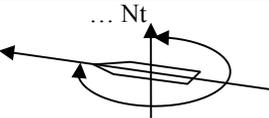
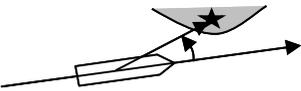
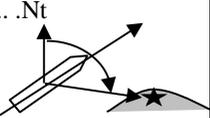
75	What does the abbreviation RCDS mean?	radio equipment system of the ship	automated navigation system using vector electronic charts	automated navigation system using raster electronic charts	sound signal system	3
76	Raster electronic navigational charts (RNC) are created on the basis of:	immediate use of hydrographic sounding	electronic satellite images	electronic digital scan of the navigational charts	aero-photographs	3
77	In which automatic navigation system can the watchkeeping officer change the image scale of the chart?	only when using RCDS system	only when using ECDIS system	it is possible in neither RCDS nor ECDIS system	it is possible in both ECDIS and RCDS system	4
78	On what medium are raster electronic navigational charts provided?	paper	tape	magnetic disc (CD)	video tape	3
79	Is it possible to change the chart image content in raster navigational charts?	yes, with a special access code	yes, with a code given by the watchkeeping officer	it is not possible	Yes, it is possible and is done only by the master	3
80	Can the movement of the ship be automatically reported?	only if the system is RCDS	only if the system is ECDIS	it is not possible	it is possible, using RCDS and ECDIS	4
81	Navigation planning of the voyage is possible:	only in ECDIS system	only in RCDS system	it is possible neither in RCDS nor in ECDIS system	it is possible, using RCDS and using ECDIS	4

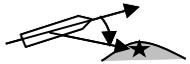
82	How can the data be automatically corrected in electronic navigational charts?	by operating the AIS	by subscription in a telecommunication channel	by a code from a technical service	It is not possible.	2
83	Semi-automatic correction of electronic navigation charts can be done:	With an additional program.	With the information that is added by a correction drive.	with GPS functions	It is not planned.	2
84	What is measured by the portion of the arc of the meridian in Mercator projection?	difference in longitude	difference in latitude	difference in equatorial miles	hour angle	2
85	The scale of the chart M = 1: 200 000, means:	1 cm of the chart corresponds to 20 km	1 cm of the chart corresponds to 2 km	1 cm of the chart corresponds to 200 km	1 cm of the chart corresponds to 200 m	2
86	What shape is the Earth?	globe	geoid	spheroid	rotation eleipsoid	2
87	The radius of the Earth is equal to:	6731 km	6371 km	6378 km	6399 km	2
88	Cardinal points and circles of the globe are:	north, south, east and west	north pole, south pole, equator, parallels and meridians	latitude and longitude	difference in meridian parts and segments	2

89	Daily rotation of the Earth is:	from west to east	from east to west	around the sun	around the moon	1
90	Person located at the North Pole:	will not see the daily rotation of the earth.	will see the daily rotation of the earth clockwise.	will see the daily rotation of the earth counter-clockwise.	will see the daily rotation of the earth in the direction of rotation of the Moon	2
91	As a basis for determining the geographic position serve:	directions: north, south, east and west	directions of the magnetic needle - north and south	the plane of the observer and the vertical	directions: zenith and nadir	2
92	The equator divides the globe into:	western and eastern part.	northern and southern hemisphere	north and east	south and west	2
93	The main meridian divides the globe into:	northern and western hemisphere	east and west	southern and eastern hemisphere	southern and northern hemisphere	2
94	Upward direction defined by a free hanging plumb in any point of the globe is called:	zenith	nadir	pole	vertical	1
95	Latitude ϕ is measured:	from 0 ° to 90 ° of equator to the pole	from 0 ° to 180 ° of equator to the pole	from 0 ° to 180 ° of main meridian to east or west	from 0 ° to 90 ° of main meridian to east or west	1

96	Longitude λ is measured:	from 0 ° to 180 ° of main meridian to north or south	from 0 ° to 90 ° of equator east or west	from 0 ° to 180 ° of main meridian to east or west	from 0 ° to 90 ° of equator to the north and south	3
97	Latitude ϕ is drawn on the chart	on the horizontal frame	on the vertical frame	in the title of the chart	it is not drawn	2
98	Longitude λ is drawn on the chart	on the horizontal frame	on the vertical frame	in the title of the chart	it is not drawn	1
99	A point: $\phi = 43^\circ 16'7''N$ and $\lambda = 028^\circ 07'4''E$ is located in:	the northern hemisphere, the western part	the southern hemisphere, the eastern part	the northern hemisphere, the eastern part	the southern hemisphere, the western part	3
100	A point: $\phi = 67^\circ 58'5''S$ and $\lambda = 178^\circ 05'8''W$ is located in:	the western hemisphere, the northern part	the southern hemisphere, the eastern part	the southern hemisphere, the western part	the northern hemisphere, the eastern part	3
101	Plane perpendicular to the plane of the meridian of the observer determines the direction:	north - south	east - west	north - east	northeast - southwest	2
102	The plane of the meridian of the observer determines the direction	east - west	northeast - southwest	north - south	south - west	3

103	At what point of the globe will we have just south direction?	the South Pole	at the intersection of the equator and the Greenwich meridian	the North Pole	the Tropic of Capricorn	3
104	In the circular system for reporting cardinal directions, the observer's plane is divided:	from 0° to 180°	from 0° to 90°	from 0° to 360°	from 0 to 400°	3
105	In the circular system for reporting cardinal directions reporting is done:	from north to west (counterclockwise)	from north to east (clockwise)	from south to east (counterclockwise)	from south to west (clockwise)	2
106	In the semi-circular system for reporting cardinal directions, the observer's plane is divided:	from 0° to 180°	from 0° to 360°	from 0° to 90°	from 0 to 400°	1
107	In the quarter system for reporting cardinal directions, the observer's plane is divided:	from 0° to 180°	from 0° to 360°	from 0° to 90°	from 0 to 400°	3
108	In the rhumb system for reporting cardinal directions, the observer's plane is divided:	from 0° to 360°	into 32 radians	into 32 parts	from 0 to 400°	3
109	A rhumb equals:	11°1/4 or 11°, 25 or 11°15'	185 meters	1/360 of a degree	1/400 of a nautical mile	1

110	True Course (TC) is the angle between:	north of the meridian and the direction of the movement of the ship.	north of the meridian and the direction to coastal object / landmark	the fore-and-aft line of the ship and the direction to an object / mark	the fore-and-aft line and the beam of the ship.	1
111	This angle is called: 	true course (TC)	true bearing (TB)	course angle (CA)	beam (B)	1
112	True bearing is called:	the angle between north of the meridian and the direction of the movement of the ship	the angle between the north of the meridian and the direction to a mark	the angle between the fore-and-aft line of the ship and the direction to a mark	the angle included between the beam of the ship and the direction to a mark	2
113	This angle is called: 	true course (TC)	true bearing (TB)	course angle (CA)	beam angle (BA)	3
114	Course angle (CA) is called:	the angle between the north of the meridian and the direction to a mark	the angle between the fore-and-aft line of the ship and the direction to a mark	the angle between north of the meridian and the direction of the movement of the ship	the angle included between the beam of the ship and the direction to a mark	2
115	True Course (TC) is measured in degrees of:	from 0° to 90°	from 0° to 180°	from 0° to 360°	from 0° to 45° port and starboard	3
116	This angle is called: 	true course (TC)	true bearing (TB)	course angle (CA)	beam (B)	2

117	On the chart we plot the value of:	the compass course	the magnetic course	the true course	the aspect of the course	3
118	True bearing (TB) is measured in degrees of:	from 0° to 360°	from 0° to 180°	from 0° to 90°	from 0° to 45° on the beam	1
119	On the chart we plot the value of:	the true bearing (TB)	the compass bearing (CB)	the magnetic bearing (MB)	the reverse compass bearing (RCB)	1
120	The course angle is measured:	from 0° to 180° to port or starboard	from 0° to 360°, counter-clockwise	from 0° to 90° to port or starboard	from 0° to 45° on the beam	1
121	This angle is called: 	course angle starboard	course angle port	true bearing starboard	true bearing port	1
122	Courses and bearing are drawn on the chart with the help of:	divider	navigational triangle or protractor	protractor	slide rule	2
123	This angle is called: 	true bearing (TB)	true course (TC)	course angle (CA)	reverse compass bearing (RCB)	1

124	True bearing is equal to:	TB = TC + CA starbord TB = TC - CA port	TB = CB - CA	TB = CC + CA starboard TB = CC - CA port	TB = MC + CA starbord TB = MC - CA port	1
125	When the ship moves against the celestial body her aircraft can be measured:	when the celestial body is on the meridian of the observer	before the culmination of the celestial body	after the culmination of the celestial body	when the celestial body is in apogee	1
126	Which electronic charts provide navigational information with higher accuracy?	raster	vector	raster and vector charts provide navigational information with equal accuracy	raster-vector charts	2
127	To accurately determine the location of the ship heavenlywith the help of celestial bodies it is necessary that:	the celestial bodiess have a height of not less than 25 ° -30 °	the celestial bodies have a height greater than 70 °	the celestial bodies have a height of less than 15 °	celestial bodies almost merge with the horizon	1
128	The principle of operation of RNS "Loran - C" is based on:	measurements at the point of receiving of the difference in the phases of fluctuations emitted from coastal stations	measurements at the point of receiving of the difference in the frequencies of oscillations emitted from coastal stations	measurements at the point of receiving of the difference in the distances between two coastal stations	measurements at the point of receiving of the difference in the arrival time of the pulses and the difference in phase of high-frequency fluctuations that fill them emanating from coastal stations	4
129	Resolving ambiguities in RNS Loran - C is achieved by:	entering codes retention signal of output station	entering codes retention signal of the leading station	introducing a correct difference in the phases of the received signals	dividing the area between the leading and output stations on rough and accurate paths	1
130	Navigation contour corresponding to the measurements with a difference-finders radio navigation systems, is:	ellipse	parabola	hyperbole	circle	3

131	Receiving indicators of RNS Loran - C are:	active because they have transmission mode	passive because only receive signals from coastal stations	active-passive because they transmit and receive signals from coastal stations.	active-passive because they receive reflected signals from coastal stations.	2
132	Satellite navigation system NAVSTAR uses satellites:	on low earth orbits	on high orbits	on medium orbits	on stationary orbits	3
133	To determine the position of the ship in the NAVSTAR system is measured:	the distance between several satellites and the ship at the same time	the difference in the distances on orthodromic and rhumb lines between two points	the difference in the distance between two satellites and the ship at different times	the difference between the speeds of two satellites and the ship at the same time	1
134	NAVSTAR satellite navigation system determines the coordinates of the ship, brought to:	Datum Krasovsky	sphere	Datum WGS - 72	Datum WGS - 84	4
135	Principle of operation of NAVSTAR differential system consists of:	comparing the position of a fixed point of the earth with its satellite coordinates	comparing the position of a ship on the chart with her GPS coordinates	comparing the position of a fixed point of the earth with its chart coordinates	comparing the GPS position of a fixed point of the earth with its coordinates estimated by the ship	1
136	The period of rotation around the Earth of the satellites in a system COSPAS-SARRSAT is:	105 minutes	12 hours	24 hours	6 hours	1
137	When will the ship's position determined by three bearings be more accurate than the position determined by two horizontal angles measured to three marks in calm sea?	when the three marks are located close to the circle of uncertainty	never	when one of the pairs of marks is observed at an angle of less than 30°	when the three bearings intersect in one point	1

138	What does correction SS of the charts of RNS "Loran - C" mean?	Both signals are received on spatial waves.	The signal from the leading station is on a spatial wave and that of the output station is on the surface.	The signal from the output station is on a spatial wave and that of the leading station is on the surface.	There is no such signal.	1
139	When is it recommended to use "corrected running fix" to determine the ship's position?	In all cases where only one mark is observed.	At the discretion of the navigation officer.	When we know the drift in the area of navigation.	When we don't know the drift in the area of navigation.	1
140	In determining the distance to a mark by vertical angle α , which method for determining the correction of the index i of the sextant is the most accurate?	by the horizon	by a landmark	by the sun	by the device passport	3
141	When measuring with a sextant the horizontal angle between two landmarks, the navigation contour is:	circle	line	hyperbole	ellipse	1
142	The value of the angle θ , between the lines of position when measuring with a sextant two horizontal angles α and β to three marks the bases of which intersect at an angle B , is determined by the dependence:	$\theta = 180 - (B + \alpha + \beta)$	$\theta = 90 + (B + \alpha + \beta)$	$\theta = 180 + (B + \alpha + \beta)$	$\theta = 360 - (B + \alpha + \beta)$	1
143	In RNS Decca radio navigation parameter is measured in:	microseconds	centicycles	nautical miles	difference in distances	4
144	Determining the ship's position by the method "running fix" is done by:	consecutive observations of one mark	simultaneous observations of two or more marks	a horizontal angle and distance to the shore	simultaneous observations of one mark	1

145	Position of the vessel must be plotted using bearings from:	close buoys	known fixed objects on shore	buoys at great distance	all of the above	2
146	You are at a point at longitude 144 ° E. The date is February 6, and the time in the time zone is 08:00 hours. Greenwich Time and Date are:	2200 5 February	2300 5 February	1700 6 February	1800 6 February	1
147	If transition is Δh with a minus sign, it is applied:	in the direction of the azimuth of the celestial body	in the direction opposite to the azimuth of the celestial body	sign of the transition does not matter	it is not applied	2
148	To determine the position of the ship by the method of celestial navigation we required:	at least four celestial bodies	not less than three celestial bodies	two	at least three celestial bodies	3
149	When observing three celestial bodies, the position of the ship is inside the "cocked hat" if:	the celestial bodies are located evenly on the horizon	the celestial bodies are located on one side of the horizon	location of the celestial bodies does not matter	the celestial bodies are approximately at the same height above the horizon	1
150	The most accurate readings for the course of the ship are taken from:	the main magnetic compass	the heading magnetic compass	boat magnetic compass	stern magnetic compass	1
151	The needle of the magnetic compass shows the direction:	defined by the direction of the movement of the vessel	north-south	east-west	fore-and-aft line of the ship	2

152	The main part of the magnetic compass is:	binnacle	bearing device	needle	deflector	3
153	The case of the magnetic compass is attached to the binnacle with the help of:	deviation device	cardan rings	optical course-and-bearing indicator	deflector	3
154	Deviation device of the ship magnetic compass is used for:	elimination of the magnetic dip	determining the total correction of the compass	compensation of ship magnetic field	elimination of ship's magnetic anomalies	3
155	The compass liquid of the binnacle of the ship's magnetic compass is:	distilled water	water solution of ethyl alcohol	antifreeze and distilled water	glycerin	2
156	Geographic pole and magnetic pole:	coincide	do not coincide	are the same concept	are false concepts	2
157	Magnetic dip is called (d):	angular deviation of the magnetic needle as a result of Earth magnetic field	angular deviation of the magnetic needle as a result of the ship magnetic field	readings from the deviation device of the ship magnetic compass	difference between the readings from the magnetic compass and the gyro compass	1
158	The ship's magnetic compass is used for:	determining the distance run and speed of the ship	determining the depth	determining the course of the vessel and taking bearings	determining the force of the sea	3

159	The main navigation device mandatory for all ships is:	radar station	magnetic compass	sounder and echo sounder	log	2
160	When at the ship's position determined by two bearings there is a prevailing error from the correction of the compass at several consecutive observations, the determined positions will be on:	a straight line forming an angle with the track of the vessel	a second order curve	a straight line parallel to the track of the ship	a spiral	2
161	The residual deviation of the main magnetic compass must not:	exceed 5°	exceed 1,5°	exceed twice the gyro error	exceed 3°	1
162	If the planned elimination or determining the deviation is done after long stay in the port, then:	immediately after unberthing the ship must start deviation	the ship must start deviation when moored at the quayside	when in open sea the ship must keep her course and speed to the deviation area and after that start deviation	before starting deviation, the ship must make one-two turning circles at different speeds	1
163	The elimination or determining the deviation of the magnetic compass is done by means of:	inclinator and deflector	vertical hard iron	additional electromagnetic pole	additional soft iron	4
164	The correction of the gyrocompass is determined	at the time of the circulation during turning circle, portside and starboardside	after the ship is set on course, upon Master's order	on a set course, at every watch	according to the regulations of the company	3
165	What are the requirements for the value of the residual deviation of the main magnetic compass?	not to exceed 5°	not to exceed 3°	not to exceed the correction of the gyrocompass	not to exceed 1,5°	1

166	At what speed of the ship is the residual deviation determined?	at full ahead if there is large deviation area	it depends on the conditions of the deviation area	making a turn without speed	slow ahead or half ahead independently of the area	4
167	How is the quadrantal deviation eliminated?	By means of athwartship magnets	By means of fore and aft magnets	By means of soft iron near the magnetic compass	By means of vertical pieces of hard iron near the magnetic compass	3
168	If the planned elimination or determining the deviation is done after long stay in the port, then:	immediately after unberthing the ship must start deviation	before starting deviation, the ship must make one-two turning circles at different speed	when in open sea the ship must keep her course and speed to the deviation area and after that to start deviation	the ship must proceed to the deviation area and after that wait at least one with engine stopped	2
169	Inertial errors in the compass stop	half an hour after the end of the manoeuvre	0,6 - 1,5 hours after the end of the manoeuvre	2-3 hours after the end of the manoeuvre	when the compass shows "north"	2
170	The repeaters of the gyrocompass reproduce the readings of the main gyro. They are:	correct only in the polar regions	correct electrical servomechanisms	manually operating	correct when the ship is underway	3
171	Search and rescue region (SRR) is:	a part of the territorial sea of each country	an area of a certain size which is responsibility of the Rescue Coordinate Center (RCC) to carry out Search and Rescue operations	an area from the sea with size 20x20 nautical miles	the airspace above the territorial sea for conducting search and rescue operations	2

172	What does the decreasing size of the "cocked hat" mean, if there is a change of the value in each of the three taken compass bearings by +2° and their redrawing on the navigational chart?	the "cocked hat" is a result of random errors	the "cocked hat" is a result of systemic errors and the change increases the influence of the errors in the compass readings	the "cocked hat" is a result of systemic errors and the change decreases the influence of the errors in the compass readings	the decreasing size of the "cocked hat" is inversely proportional to the value of the change in the bearings	3
173	At the first midnight after crossing the international date line of the time	proceeding eastwards one date is skipped and proceeding westwards one date is repeated	proceeding eastwards one date is repeated and proceeding westwards one date is skipped	upon decision of the Master	proceeding eastwards and westwards one date is skipped	1
174	The chronometer works using:	the ship's time	the zones time	Greenwich time	C.E.T.	3
175	The correction of the chronometer is determined:	by special radiostations	by random radiostation	it is not determined, it is invariable	by the manufacturer	1
176	Turning automatically and setting on a new course is possible:	using ECDIS and adaptive autopilot	using ECDIS and conventional autopilot	using RCDS and conventional autopilot	it is impossible	1
177	Controlling the movement of the ship can be performed:	only if ECDIS is used	only if RCDS is used	it is possible when ECDIS and RCDS are used	it is impossible	3
178	Is there any requirement the facilities for the electronic charts to be driven by emergency power?	there isn't	there is	if provided by the manufacturer	it is impossible	2

179	If necessary, the navigator can change the scale of the chart image:	only in RCDS	only in ECDIS	it is impossible	it is possible both in RCDS and ECDIS	4
180	By using which system it is possible the navigator to select which kind of information to see on the monitor?	RCDS	ECDIS	CDR	RDF	2
181	Resolution A 817(19) of IMO allows for navigation the following electronic charts:	CDR	VAC	ENC	RNC	3
182	The complete navigational information from the navigational books can be reproduced only by:	RCDS	ECDIS	CDR	RDF	2
183	Can the chart image of the electronic charts be combined with the radar image?	yes - on the radar	yes - on the monitor of the ECDIS	no, it is not possible	yes - on the monitor of GPS	2
184	When exiting the specified limits of a planned route an alarm sounds	only when using RCDS	only when using ECDIS	no such alarm	when using both ECDIS and RCDS	4
185	What are the consequences, if there are differences in the geodetic base used by GPS and ECDIS?	GPS emits an alarm signal	ECDIS is turned off	GPS is turned off	ECDIS emits an alarm signal	4

186	What are the consequences for ECDIS upon loss of signal from the GPS?	it stops working	automatically switches to ARPA	an alarm signal is sounded and ECDIS switches to DR	emergency power is turned on	3
187	Is it possible the operator of the electronic charts to make corrections using the keyboard?	only on raster navigation charts	it is impossible	only on vector navigation charts	it is possible in both raster and vector charts	4
188	In rough seas, which of the visual methods for determining the ship's position with two navigational isolines will provide maximum accuracy of the observations if the lines cross at an angle of $30^\circ < \alpha < 150^\circ$ in any of the four cases	two visual bearings	two horizontal angles	bearing and vertical angle	running fix	2
189	When sailing near the shore and determining ship's position using visual bearings at one moment, first we have to measure:	bearings to the marks near the fore-and-aft line	bearings to the marks being in the beam relative bearings of the ship	in the order of increasing/decreasing the value of the bearing	the bearings to the marks being on the side to the shore, clockwise	1
190	COLREG rules for shiphandling are applied:	in low visibility	in normal visibility	in all conditions of visibility	whenever the ship is underway	3
191	What is the most important to be considered if there is a danger of collision between ships	the size of the ships that will pass each other	the speed of the ships approaching each other	the visibility	the nature and value of the change of the bearing	4
192	When our ship is at anchor together with other ships, what is the quickest way the OOW to determine that the neighbouring ship's anchor is drifting?	periodically to determine the position of the other ships	if there is a change of the bearing and the distance to the neighbouring ship	when he confirms the position of the ship and notes that there is a change of the bearing and distance to the neighbouring ship	when he monitors the bearing and the distance to the other ships on the radar station and registers a change	4

193	What is the way for determining the exact team for the watch?	it is specified in the document for the minimum crew	it is specified in the procedure of the company for the watch	it is ordered by the master	it is determined by the flag administration	4
194	In what order do the officers take over the watch?	in order required by the company	in order assigned by the master	in order required by the flag administration	in order required by the PSC	1
195	How long is the navigational watch?	4 hours	as much as is agreed between the company and the unions	6 hours	as much as the master orders	1
196	Where are the team, the order of taking over the watch and the duration of the watch regulated?	in the procedures of ISM Code	in MINIMUM SAFETY MANNING DOCUMENT	in the ship's log	in the schedule for watches on the bridge	1
197	What is the minimum time for relaxing per day for a watchkeeping officer during normal operation of the ship?	10 hours	12 hours	16 hours	8 hours	1
198	What is the minimum time for relaxing per day for a watchkeeping officer if there are additional duties?	10 hours	8 hours	4 hours	6 hours	4
199	Who has to take the necessary safety measures and responsibility, if the propeller of the ship overwinds at the quayside?	the chief engineer	the watchkeeping engineer	the OOW	the master of the ship	4

200	Can the helmsman on watch perform the duties of the lookout?	no, never	yes, if he is not directly involved in the shiphandling using a compass	no, he is not qualified	no, he cannot leave the bridge	2
201	Can the watchkeeping officer stay alone on the bridge?	no, never	yes, only at night when the ship is on autopilot	yes, only in daylight and in calm weather	yes, always when the master orders	1
202	Can the watchkeeping officer leave the bridge after handing over the watch to the master?	yes, he has no more duties on the bridge	no, his working time has not ended	yes, after permission from the master	no, he takes over the watch from the helmsman	3
203	When the ship is underway the watchkeeping officer is obliged to determine the compass correction	every hour on a steady course	at every alteration of the course and once in a watch on a steady course	every two hours on a steady course	only at the beginning of the watch	2
204	The watchkeeping officer may request from the Central Control Room (CCR) an emergency move	only after consulting the chief engineer	only after permission from the master	always after he assumes that the circumstances require this	to check the readiness of the engine	3
205	Upon relieving of watch the watchkeeping officer being relieved may refuse to hand over the watch if	he hasn't informed the master about the relieving of watch	the helmsman is not relieved	he has doubt that the watchkeeping officer who is relieving him is unable to keep the watch	he has not covered the monthly limit for his working time	3
206	The readings of the magnetic compass and the gyrocompass are compared	once per day by the master	once per day by the watchkeeping officer	periodically every watch by the watchkeeping officer	by the watchkeeping officer at the time of taking the watch	2

207	During the watch the watchkeeping officer has no right to:	switch the radar on different ranges	make corrections to charts and pilot books	turn on the echosounder	leave the bridge	4
208	Is the watchkeeping officer allowed to leave the bridge during his watch?	No, never, because he is responsible for watchkeeping	Yes, if the master calls him in the saloon	Yes, when the ship is on autopilot and he has lunch	Yes, only for a short period of time to make some correction on the navigational chart	1
209	The bridge watch can't change when	the ship is sailing in a river	the ship is loaded with explosive cargo	the ship is manoeuvring on crossing courses with another ship	there aren't charts of the area with proper scale	3
210	When sailing near the shore, if the watchkeeping officer notices an oil spill, he must	only note the coordinates and the fact in the logbook	only note the coordinates and the fact in the logbook, and inform the master	inform the nearest rescue coordination centre by means of the radiotelephone	note the coordinates and the fact in the logbook and inform the coastguard or the Maritime Administration	4
211	A check of the switching from autopilot to manual steering is carried out:	once per day	only before sailing	only before entering a strait	at least once per watch	4
212	On a long voyage using a pilot the responsibility for the navigational safety of the ship is taken	by the pilot	jointly by the pilot and the master	by the watchkeeping officer	jointly by the pilot and the watchkeeping officer	3
213	When is it considered that the master has taken over the watch?	when he comes on the bridge and turns on the radar	when he comes on the bridge and asks for information about steering the ship	when he declares that he is taking the watch and this is noted in the logbook	when he gives an order for changing the course or speed of the ship	3

214	When sailing in open sea and the calm weather, and the watchkeeping officer detects a drift because of current, he ...	checks the passage plan and corrects the course if necessary	informs the master and waits for his orders	informs the chief-officer and waits for his orders	changes from automatic to manual steering	1
215	Who is responsible for the safety of navigation when the ship is underway and watchkeeping is carried out?	the master	the watchkeeping officer	the master and watchkeeping officer jointly	the watchkeeping officer and the watchkeeping engineer jointly	2
216	'Night Orders Book" and" Master Standing Orders" are logbooks in which the master records:	instructions to the watchkeeping officer, at night or during his absence from the bridge	schedule of watches in an emergency	schedule of the watches in port	instructions from the shipowner	1
217	When a wing-in-ground vessel is sailing in non-displacement mode	other ships must keep clear	she must keep clear from other vessels	the rules for power-driven vessels apply	she must keep clear from small ships	3
218	The Ice Patrol Service system ensures the safety of navigation:	in the North Atlantic	in the Arctic Ocean	in the North Pacific Ocean	around the coast of Antarctica	1
219	Estimation of the total cohesion of drift ice is given by:	the thickness of the ice field in centimeters	the size of the ice floes	the number of ice floes per square kilometer	a score from 1 to 10	4
220	Which of these signs does not apply to typical entry in the ice area?	small pieces of ice	entering an area of heavy snowfall	increased refraction allowing to visually observe objects far beyond the borders of the visible horizon	lack of swell with moderate to strong wind	2

221	In compliance with SOLAS the International Patrol Service operates annually:	from February 15 to July 01	from January 15 to August 01	from 01 February to July 01	from January 01to June 01	1
222	The meteorological report includes:	three sections	four sections	six sections	eight sections	3
223	What is to be considered above all when there is a danger of collision?	the size of the target ship	the time of day	the condition of visibility	the type and change of the bearing	4
224	In an analysis of a situation with more than one target simultaneously, with change of course, which target is the limiting one:	the target, which requires greatest change of the course of own ship	the head-on target	the target,sailing with the same course and speed as own ship	the target, which is crossing own ship's course ahead of her bow	1
225	In an analysis of a situation with more than one target simultaneously, with change of speed, which target is the limiting one:	the target, which requires greatest reduction of the speed of own ship	the target, which requires lowest reduction of the speed of own ship	the target,sailing with the same course and speed as own ship	the target, which has stopped abeam of own ship	1
226	The elements of a collision situation are:	bearing and distance to the target	course and speed of the target	distance to closest point of approach and time to closest poin of approach	course and speed of the target and distance to closest point of approach	3
227	In reduced visibility ships must sail with:	safety speed	minimal speed	economic speed	without limit of speed	1

228	When there is risk of collision in restricted visibility:	there is a stand-on vessel	there is no stand-on vessel	the stand-on vessel is negotiated	the smaller vessel is giving way	2
229	An anticollision manoeuvre must be with:	a lot of small manoeuvres	one sharp manoeuvre	one small manoeuvre	manoeuvres must avoided, if possible	2
230	The anticollision manoeuvre must be started:	upon detection of excessive approach	if the target is not manoeuvring	after mutual agreement	simultaneously by both ships	1
231	Solving the problem of anticollision manoeuvre can be done by:	only true mode	only relative mode	only true and relative mode	by interpolation	2
232	Targets are clasified as	hazardous and non-hazardous	hazardous and potentially hazardous	moving and stationary	hazardous, potentially hazardous and non-hazardous	4
233	In order to start an anticollision manoeuvre, the following factor(s) must be present:	closest point of approach CPA is lower than the safety distance	time to closest point of approach TCPA is lower than the safety time	both factors require manoeuvring	either factor requires manoeuvring	1
234	In order to start an anticollision manoeuvre, it is necessary to know:	CPA and TCPA	course and speed of the target	CPA and speed of the target	CPA and TCPA, course and speed of the target	4

235	An anticollision manoeuvre can be done:	only by course change	only by change of speed	by speed change or/and course change	with speed astern	3
236	Vector triangle manoeuvre problem is solved by:	$V\rho = Vt + Vm$	$Vt = Vm + V\rho$	$Vm = Vt + V\rho$	$V\rho = Vt - Vm$	2
237	When measuring bearing and distance from a moving ship to a target, and the data on the chart are at same point, this means:	the target is on drift	the target has the same speed and course as ownship	the target is moving on the opposite course, but with a speed twice lower than ownship's	the target is approaching ownship very slowly	2
238	When sailing in restricted visibility, the RADAR must be switched on to:	small-scale range, providing timely and reliable detection of targets	large scale scope to ensure detection of small objects in the vicinity of ownship	small scale, periodically switching to large scale	medium-scale	3
239	When a vessel sails in a narrow channel, the RADAR is recommended to be in mode	north up	course up	by watchkeeping officer decision	on standby	2
240	How far from the center of the PPI (from center of the scan) the accuracy of the measured radar bearing to the echo signal from the target is maximum?	at maximum distance from the center of the scan	from 1/3 to 2/3 from the center of the scan	the accuracy is the same within the entire range for the respective scale	near the center of the scan	1
241	If the RADAR is calibrated on range of six miles, and PPI is on 24 mile scale, the measured radar distances to targets will be:	with higher accuracy than the calibration range	with lower accuracy than the calibration range	accuracy is the same for all ranges of the RADAR	with higher or lower accuracy than the calibration range	2

242	What determines the dead zone of the RADAR?	the pulse length of the transmitted signal	the horizontal radiation pattern of the radar	the height of the antenna	the operating range of the RADAR	3
243	What distance can an activated transponder be detected at?	up to 50 miles with airplane RADAR and up to 35 miles with ship RADAR	up to 30-37 miles by plane RADAR and up to 10 miles with ship RADAR in heavy sea up to 8 by Beaufort scale	by a ship RADAR at a distance depending on the sea state, but not greater than 50 miles	up to 10 miles with ship RADAR in calm sea	4
244	ARPA modes are:	only true mode	only relative mode	true and relative	only absolute mode	3
245	Maximum ARPA errors in CPA, TCPA and speed of the target under stable tracking are....?	0,7 n.mi. 7,5°; 1,2 kn	1,0 n.mi.; 10°; 1,4 kn	0,8 n.mi.; 8°; 2,0 kn	2,0 n.mi.; 8,5°; 2,2 kn	1
246	When safe speed is determined for vessels equipped with radar, the following factor must also be taken into account:	the type of RADAR	the type of antenna	the limitations caused by the range scale used	the blind sector	3
247	Which is the main factor determining the size of the dead zone of the RADAR?	the pulse length	the size of the vertical radiation pattern of the radar	the transmission power	the size of the horizontal radiation pattern of the radar	2
248	Which is the main factor determining the size of the dead zone of the RADAR?	the pulse length	the height of the antenna	the transmission power	the size of the horizontal radiation pattern of the radar	2

249	Which type of radar can activate a Racon?	an X - band radar	an S - band radar	a C - band radar	either an X - band or an S - band radar	1
250	What is the principle of operation of a radar in a head-up mode?	maintains the heading line when the vessel is yawing	maintains the accuracy of the input course data from the gyrocompass when the ship is turning	maintains the stability of the image of the heading line when the ship is turning	maintains the stability of the image when the vessel is yawing	4
251	The maximum distance of radar visibility of landmarks depends on:	the pulse length of the radar	the height of the antenna and the radar height of the landmark	the transmission power of the radar	the width of the horizontal radiation pattern of the radar	2
252	Radar, operating at a frequency of 9 GHz, is:	an S - band radar	a C - band radar	an X - band radar	non of the above	3
253	The image of the velocity vector of the targets, shown on screen ARPA, is in mode:	true vector	course mode	relative vector	true and relative vector	4
254	On the ARPA screen the target is considered dangerous when:	the continuation of its relative vector passes through a circle with own ship position at the center and a radius equal to the preset safety distance	the continuation of its true vector passes through a circle with own ship position at the center and a radius equal to the preset safety distance	the continuation of its true vector passes through the position of own ship	the continuation of its relative vector passes through the position of own ship	1
255	Radar, operating at a frequency of 3 GHz, is:	an S - band radar	a C - band radar	an X - band radar	non of the above	1

256	When sailing in restricted visibility, the ship radar station must be switched to:	large-scale range, providing timely and reliable detection of targets	small-scale scope to ensure the detection of small objects in the vicinity of the ship	large-scale range, with periodic switching of small-scale	large-scale range	3
257	When sailing in a narrow waters, the radar station is recommended to work in mode:	north up	course up	according to watchkeeping officer estimation	according to the rules of the shipowner	2
258	How far from the center of the PPI (from center of the scan) is the accuracy of the measured radar bearing to the echo signal from the object maximum?	at the maximum distance from the center of the scan	1/3 to 2/3 from the center of the scan	the accuracy is the same within the entire range for the respective scale	at a minimum distance from the center of the scan	1
259	When determining safe speed, vessels equipped with radar must also take into account:	the model of a radar station	the type of the antenna	the limitations of the range scale used	the accuracy of measurement of the distance	3
260	What radar range should be used in restricted visibility?	long-range	close range , periodically switching to long range	close range	long range , periodically switching to close range	2
261	When navigating in reduced visibility caused by heavy rainfall, the range of operation of the ship radar station may be reduced to:	30-50 %;	40-60 %;	50-70 %;	0,1	2
262	What determines the dead zone of the radar station?	the length of the pulse of the transmitted signal	the horizontal beam of the station	the ship's course from the current height of the antenna	the current height of the antenna	4

263	When measuring radar bearing and distance from a moving vessel, it has been established that the vector of the relative speed of the target is twice smaller than the velocity vector of own vessel and its direction is opposite. This means that:	the target is moving toward the ship	the target is on drift	the course of the target is same as the course of own ship	the target is moving at the same course and speed as the own ship	3
264	When measuring radar bearing and distance from a moving vessel, it has been established that the vector of the relative speed of the target is twice smaller than the velocity vector of own vessel and its direction is opposite. This means that:	the target is moving at a speed equal to half the speed of the own ship	the target is on drift	the course of the target is the opposite of own ship's course	the target is moving at the same course and speed as the own ship	1
265	When measuring radar bearing and distance from a moving vessel, it has been established that the vector of the relative speed of the target is equal to the velocity vector of own vessel and its direction is opposite. This means that:	the target is moving at a speed equal to half the speed of the own ship	the target is on drift	the course of the target is the opposite of own ship's course	the target is moving at the same course and speed as the own ship	1
266	When using ARPA on crossing courses, CPA (Closest Point of Approach) is:	the point in the course of the vessel where the target crosses its course on the bow	the nearest point where the target will get closer to the ship	the distance from the bow or stern of the ship, where the target will pass	the shortest distance between the ship and the target	2
267	When the object is not observed, the range to the RACON signal displayed on radar screen is measured to	the farthest edge of signal from the center of the PPI	under the base of the nearest edge of signal	the nearest edge of signal from the center of the PPI	it does not matter	2
268	The ARPA display is	a radar picture of the area	processed videosignals reproduced in convenient mode	a satellite picture of area	none of the answers is correct	2

269	In ARPA computing the track of a target is performed by means of	polar coordinates	rectangular coordinates	geographic coordinates	astronomical coordinates	2
270	A SAR mission co-ordinator (SMC) is	the master of the ship first to arrive on the scene of the distress	the commander of the helicopter first to arrive on the scene of the distress	the master of the ship in distress	the official temporarily assigned to co-ordinate an apparent distress situation	4
271	The On-Scene Coordinator (OSC) is appointed by	the authorized person from the Rescue Coordination Center	the radio station which has received the distress alert first	the duty officer of the Coast Guard	the duty officer of the Navy	1
272	An EPIRBs is:	a radar transponder for SAR	a manual for SAR	a report form for participation in SAR	an automatic emergency radio buoy	4
273	A SARTs is	a radar transponder for SAR	a manual for SAR	a report form for participation in SAR	an automatic emergency radio buoy	1
274	The master of a ship which is not rendering assistance after the announcement of SAR operation has to	inform only the shipowner	inform only the master of the ship in distress	make a record in the log book	set adrift and await the end of SAR	3
275	The On Scene Coordinator (OSC) must be in communication with the Rescue Coordination Center RCC using	telegrams in plain text	signals coded according the International Code of Signals	messages formed according SITREP standard	messages formed according EPIRB standard	3

276	When a container or a package dropped by a rescue plane (helicopter) is sticked all over with red streamer it contains	medical supplies and first aid equipment	food and water	blankets and protective clothing	various equipment - stoves, kitchen utensils	1
277	When a container or a package dropped by a rescue plane (helicopter) is sticked all over with black streamer it contains	medical supplies and first aid equipment	food and water	blankets and protective clothing	various equipment - stoves, kitchen utensils	4
278	When a container or a package dropped by a rescue plane (helicopter) is sticked all over with blue streamer it contains	medical supplies and first aid equipment	food and water	blankets and protective clothing	various equipment - stoves, kitchen utensils	2
279	When a container or a package dropped by a rescue plane (helicopter) is sticked all over with yellow streamer it contains	medical supplies and first aid equipment	food and water	blankets and protective clothing	various equipment - stoves, kitchen utensils	3
280	When a plane in distress is splashed down and its course is anounced the rescue ship has to	keep a course parallel to the plane's course	drift and to wait the splash-down	keep a course against the wind	keep a course against the waves	1
281	In joint SAR operation with a plane when the plane makes a circle around one of the involved ships and crosses her course low behind her stern it means	Your assistance is not required anymore	Stop engines	Stay on a drift	Keep this course with full ahead	1
282	In joint SAR operation with a plane when the plane makes a circle around one of the involved ships and crosses her course low ahead of her bow it means	Your assistance is not required anymore	Stop engines	Stay on a drift	Keep this course with full ahead	4

283	A SAR plan is worked out in advance by	the Rescue Coordination Center - RCC	the On Scene Coordinator (OSC)	the Traffic Control operator	the Coast Guard operator	1
284	The Datum point in the SAR area is	the position where the distress signal is transmitted	the position of the ship appointed as an OSC at the moment when she has assumed this responsibility	the most probable position of the distressed vessel at the initial moment of applying some search pattern	the position the OSC ship at the initial moment of applying some search pattern	3
285	The weather correction factor fw is used	to correct the speed of the search in accordance with the visibility	to correct the general course of the search	to correct the sweep width in accordance with the wind and the waves	to correct the search area coverage	3
286	In case of immediate actions the radius for SAR is	5 nm	10 nm	20 nm	equal to the turning circle radius of the searching ship	2
287	When performing a parallel search pattern in good weather conditions rescue ships must proceed	with different speed according to their seaworthiness	with their own highest speed	with their own lowest speed	with identical speed equal to the highest speed of the slowest ship	4
288	Expanding square search pattern SS is applied	only by a rescue helicopter	by rescue ships in coordination with aircraft	only by single rescue ship	by two or more rescue ships proceeding in column formation	3
289	When using the expanding square search pattern SS the first leg of the rescue ship is	oriented directly into the wind	oriented against the wind	oblique against the waves	perpendicular to the current direction	2

290	When a single ship is using the sector search pattern VS the radius of the pattern is	10-20 nm	0.5-1.5 nm	2-5 nm	7-14 nm	3
291	When two or more vessels are applying a parallel sweep search pattern the first leg of each of them is oriented	against the wind in the area	into the wind in the area	always parallel to the parallel	toward the expected drift of the ship in distress	4
292	When one of the ships involved in SAR operation arrives first on scene	she awaits drifting the assignment of the OSC	she sets adrift and begins to send meteorological information to RCC	she marks the starting point of the SAR area with a floating buoy or with a smoke canister and then sets adrift	she proceeds to the starting point and applies expanding square search pattern (SS)	4
293	When performing coordinated search the involved ships	follow the rules for navigation and collision avoidance issued by the OSC	follow the rules for navigation and collision avoidance issued by the RCC	negotiate the rules for navigation and collision avoidance	follow strictly the Colreg	4
294	The first phase of search is considered concluded when	the first trace of the target in distress has been found	the rescue ships have performed one search of the area	a specialized rescue vessel arrives in the area	the RCC changes the OSC	2
295	An unsuccessful search is terminated when	the whole planned search area is searched	the visibility becomes restricted	there is no more reasonable hope for rescuing survivors	all resources of the OSC ship are exhausted	3
296	The decision to terminate an unsuccessful search is made by	the Committee on Disaster Risk Reduction of UN	the OSC	the government of the flag state of the ship in distress	the shipowner of the ship in distress	2

297	The area where an unsuccessful search is performed is	reported as dangerous for navigation	delivered to the insurers of the distressed ship for protection	delivered under the protection of the nearest country	reported as high caution area	4
298	When the ship in distress has been found, assistance and rescue are rendered by	the ship which has found the target	the OSC ship	the most appropriate ship to fulfill this operation appointed by the OSC	the last ship from the search pattern	3
299	When is an emergency locator transmitter ELT used to transmit a distress signal?	only according to the instructions of the RCC	when the other devices are not applicable	only according to the instructions of the OSC	always in combination with the other devices transmitting emergency signals	2
300	When is an emergency position-indicating radio beacon EPIRB used to transmit a distress signal?	only according to the instructions of the RCC	when the other devices are not applicable	only according to the instructions of the OSC	always in combination with the other devices transmitting emergency signals	2
301	Inmarsat-E EPIRBs has coverage and functions in the area	between 30° North and South latitude	between 70° North and South latitude	of North Atlantic	of North Pacific	2
302	When it is necessary to perform evacuation because of medical reasons a message for medical assistance is sent to	the nearest RCC	the International Medical Radio Centre "CIRM"	the ship operator	the Embassy or the Consulate of the flag state under whose laws the ship operates	1
303	When preparing a joint operation with a helicopter for evacuation of an injured person the extended fire fighting hose lines are	directed to the contact area with the helicopter	directed opposite to the direction of the contact area	lowered overboard	detached from the hydrant	2

304	When preparing a joint operation with a helicopter for evacuation of an injured person on board of an oil tanker	the pressure of inert gases in tanks must be raised to the allowable maximum	the tanks must be opened for ventilation	the pressure of inert gases in tanks must be reduced to the allowable minimum	the ballast is discarded	3
305	When preparing a joint operation with a helicopter for evacuation of an injured person on board of a bulk carrier	the ventilation of bulk cargo is interrupted	the intensity of ventilation of the cargo is raised	the ballast is discarded	all ventilation hatches of the holds are opened for ventilation	1
306	When preparing a joint operation with a helicopter for evacuation of an injured person on board is prepared	a life raft	a lifeboat for launching	the emergency generator	a drifting anchor	2
307	In clear and warm weather and temperature above 20°C in case of abandon ship procedure what is not necessary ?	sending a distress message	putting on a life jacket correctly	wearing a hydrothermal survival suit	keeping the life boat or life raft as close to the ship as possible	3
308	How is a distress message with INMARSAT B sent?	by the generator of distress messages or by sending a telex message	by pressing the DISTRESS button	by e-mail or by telex service	by telephone service	1
309	How is a distress message with INMARSAT C sent ?	using the menu DISTRESS ALERT or similar menu or sending a telex message	only with a telex message	most often by a telex message	by pressing the DISTRESS button	1
310	You have acknowledgement of receipt of a distress alert on frequency 2187,5 kHz. Which frequency is used for sending a message in NBDP? What is this frequency called?	2182 kHz - a telephone distress frequency	4125 kHz - a digital telephone frequency	2182 kHz - an associated communication frequency	2174,5 kHz - an associated distress frequency	4

311	How many systems can the ship use for sending a Distress Alert?	at least 3 different communication systems (INMARSAT, MF/HF/VHF, COSPAS-SARSAT)	at least 2 different communication systems	at least 1 communication system	in accordance with the tonnage of the ship	2
312	What mandatory equipment must the VHF EPIRB contain?	EPIRB on 70 CH + SART	EPIRB on 70 CH + L-band EPIRB	EPIRB on 70 CH + EGS	EPIRB on 16 CH + SART	1
313	In case of a SAR operation the master must comply with	the FAL convention	the convention 108	the SOLAS convention	the IAMSAR Manual	4
314	How is watchkeeping in GMDSS conducted ? Do people take part in Distress communication - for example when a distress signal is transmitted by another ship?	the watches are automatic including distress communication; it is not necessary for people to participate	the watches are completely automatic till the acknowledgement of a distress signal, after that an operator from the ship must take part in the communication	watches are auditive and manual, an operator always participates in communication	automatic and manual watches alternate	1
315	What are the instructions for relaying and acknowledgement of a distress message?	DISTRESS. ACKNOWLEDGEMENT.	DISTRESS RELAY ACKNOWLEDGEMENT. RELAY.	DISTRESS RELAY. DISTRESS ACKNOWLEDGEMENT.	DISTRESS. DISTRESS AND ACKNOWLEDGEMENT RELAY.	3
316	You have received an acknowledgement of receipt of your distress message on frequency 2187,5 kHz. What frequency will you use to send your messages using NBDP service? What is this frequency called?	2182 kHz - a telephone distress frequency	4225 kHz - a digital telephone frequency	169 MHz - a distress radio frequency	2174,5 kHz - an associated distress frequency	4
317	Mention some of the important functions of NCS?	they provide the connection with LES for service information, distribute connection channels and provide a priority of distress	they provide ship-to-shore connection	they monitor the other participants in the communication (LES, ship, shore station)	they provide connection between ship and aircraft in SAR operations	1

318	How many systems can be used to transmit a distress alert?	at least 3 different communication systems (INMARSAT, MF/HF/VHF, COSPAS-SARSAT)	at least 2 different communication systems	at least 1 communication system	all available systems onboard	2
319	What tanker DW requires additional emergency towing arrangement?	< 20 000 t	> 50 000 t	< 50 000 t	> 20 000 t	4
320	Should the design, construction and testing of prototype emergency towing arrangements of tankers be approved by the Administration?	no	yes	according to the shipowner's requirements	according to the charterer requirements	2
321	Tanker emergency towing arrangements must be ready in case of absence of power for tankers constructed on or after	1.7.2002	1.1.2002	1.7.2006	1.1.2005	1
322	Are the emergency towing arrangements mandatory for tankers < 20 000 t?	yes	according to the shipowner's decision	according to the charterer decision	no	4
323	How many additional emergency towing arrangements have to be installed on the tankers ?	Three	One	Two	None	3
324	Who should have knowledge of the main steering gear and emergency steering gear ?	Master, officers and engineers	Master and deck officers	engineers only	helmsmen only	1

325	Emergency drills for abandonment of the ship and fire drills are conducted at intervals of not more than:	once every three months	once every six months	once per month	once every two months	3
326	Your ship has run aground in soft mud. You will have the best chance to refloat her, if she has run aground during :	low water at spring	low water at neap	high water at spring	high water at neap	1
327	In case of stranding in a shoal the master immediately :	has to order complete sounding of the ship tanks and soundings around the ship	declare General Average	search for help	inform the cargo owner	1
328	In case of a collision with another vessel, firstly :	A salvage agreement is signed	A salvage agreement is signed	communication with the shipowner of the other vessel is made	the seaworthiness of the ship is checked	4
329	In case of fire on board firstly :	the passengers are evacuated	the crew is evacuated	the ship's safe and logbook are rescued	commences the rescue of the remaining cargo	1
330	In case of heavy sea the length of the towing hawser should be equal to :	the length of the seawave	half the length of the seawave	1,5 the length of the seawave	several seawave lengths	1
331	Visual signal displayed on the deck of a ship as letter "V" means:	search for help	search for medical assistance	No or negative	Yes or positive	1

332	Visual signal displayed on the deck of a ship as letter "X" means:	search for help	search for medical assistance	No or negative	Yes or positive	2
333	Visual signal displayed on the deck of a ship as letter "N" means:	search for help	search for medical assistance	No or negative	Yes or positive	3
334	Visual signal displayed on the deck of a ship as letter "Y" means:	search for help	search for medical assistance	No or negative	Yes or positive	4
335	Can the distress signal be received through the radioreceiver of the system NAVTEX?	No, it is not possible - it transmits only navigational warnings	Yes, it is used for the purpose of the SAR operations as well	No- it is used only for chart corrections	No - it is not a component of GMDSS	2
336	Communications on the distress position is made on :	VHF Chanel 16	VHF Chanel 36	VHF AM	VHF Chanel 13	1
337	The verbal signal "MAYDAY" repeated three times is used when :	the safety of the ship is threatened	there is a man overboard and the master requires immediate help	abandon drill is performed on board of the vessel	a rescue helicopter is proceeding for landing on board	2
338	The verbal signal "PAN-PAN" repeated three times is used when :	the safety of the ship is threatened	there is a man overboard and the master requires immediate help	abandon drill is performed on board of the vessel	a rescue helicopter is proceeding for landing on board	1

339	The verbal signal "SECURTY", pronounced as "SEIQRITEI" repeated three times is used when :	the safety of the ship is threatened	as warning for the approaching whirlwind or squall	there is an ongoing drill for the removal of the consequences of a pirate attack on a vessel	an approaching rescue helicopter is warned to keep clear of the ship	2
340	During verbal communications between ships in the distress area, the term "BREAK" is used for:	announcement of the interruption of the participation of a particular ship into the SAR operation	announcement of the intention of a newly arrived vessel to join the SAR operation	separation of portions of a message or one message from another	an instruction to a particular vessel to stop	3
341	During verbal communications between ships in the distress area, the term "OUT" is used for:	announcement of the end of a transmission or message, when no reply is expected or required	an instruction for a particular ship to leave the search and rescue pattern	separation of portions of a message or one message from another	order of the OSC to all vessels to leave the distress area	1
342	During verbal communications between ships in the distress area, the term "SILENCE", repeated three times is used for:	announcement of the end of a transmission or message, when no reply is expected or required	an announcement that there is a man over board and the master requires assistance	order of the OSC to all vessels to enhance their attention	a requirment all transmission to cease/stop/ immediately	4
343	During verbal communications between ships in the distress area, the term "ROGER" means:	I have received your transmission satisfactorily.	I can not read you	" I can not read you. Please repeat.	"Wait for a reply"	1
344	During verbal communications between ships in the distress area, the term "WAIT" means:	Wait for a reply	"Go on drift and wait."	"Why do you follow this course?"	I must pause for a few seconds, stand by for further transmission "	4
345	The control over the assigned additional look-outs when the ship is underway is performed by:	the chief officer	the senior helmsman	the boatswain	the OOW	4

346	You keep a course of 050 ° and your maximum speed is 12 knots. The eye of the tropical cyclone is on bearing of 120 ° and at a distance of 110 miles from your position. The tropical cyclone is keeping a course of 285 ° and a speed of 25 knots. If you manoeuvre with a speed of 12 knots to avoid the cyclone, the maximum distance to the point of approach will be?	77 miles	82 miles	87 miles	93 miles	1
347	When a ship uses the traffic separation scheme (TSS), she must sail	according to the specific conditions and current situation	close to the separation line or traffic zone	in the respective corridor, in the general direction of the traffic	far off the separation line or traffic zone	3
348	The full speed of the vessel is achieved :	by maximum allowable loading of the ship power plant	by normal loading of the ship power plant	by emergency loading of the ship power plant	only with a wind aft	2
349	The full speed of the vessel is used:	for short periods of 1 to 2 hours	for long periods of sailing	only for sea trials	only for sailing with strong adverse current	2
350	The tactical diameter of circulation is the distance after the ship turns:	between the initial and opposite course	measured on the initial course from the point of rudder deflection and the point of turn on 90 °	measured on the initial course to the point of maximum deflection of the ship from it	at 360 ° between the initial and the new course	1
351	The circulation of the ship during turning is a curve described by:	the center of floatation .	the center of gravity of the ship	the center of the turning of the ship, the so called "Pivot point"	the stem of the ship	2

352	The drift angle at the turning circle is formed :	by the tangent to the turning circle and centre plane line of the ship	by the tangent to the turning circle and the middle of the ship	by the tangent to the turning circle and the waterline	by the tangent to the turning circle and the stern post of the ship	2
353	The heel of the ship at a turn of 180 °:	Does not change	changes dynamically	is to one of the ship's sides only	is not influenced by the speed of the vessel	2
354	Advance at turning circle is :	the distance between the initial and opposite course	the maximum shift of the ship to the side opposite to the turn	the distance on the initial course from the point of giving order to the rudder to the projected point on it of the point of alteration of the course with 90 °	the distance on the initial course from the point of giving order to the rudder to the point of significant deviation of the ship's bow from the initial course	4
355	Information about the manoeuvrability of ships with length over 100 meters and all tankers is available:	only in the poster on the navigational bridge	in the Pilot card, wheelhouse poster and manoeuvrability booklet of the ship	only in the Pilot card	in the information on the ship's stability prepared by the auditing organization	2
356	The "Pilot Card" contains information about:	the current manoeuvrability of the vessel	the manoeuvrability of the vessel in shallow waters and port areas	the manoeuvrability of the ship at maximum draft	the manoeuvrability of the ship under ballast	1
357	The "Pilot Card" should be filled:	once at the beginning of the voyage	before each pilot service	only with pilot service in straits	only with pilot service in inland waters	2
358	On tankers, the board available on the navigation bridge (the so called "Wheelhouse Poster") contains stoppage characteristics:	only under ballast	only fully loaded	under ballast and fully loaded	only at medium draft	3

359	According to the Interim standards for ship manoeuvrability a ship is able to manoeuvre if:	$l = 4,5 L$ and $D_T = 5 L$	$l = 4,5 L$ and $D_T < 5 L$	$l < 5 L$ and $D_T = 7 L$	$l = 4,5 L$ and $D_T = 5 L$	2
360	According to the Interim standards for manoeuvrability a vessel is able to stop at "full astern" if:	$Sc > 15 L$	$Sc < 15 L$	$Sc > 10 L$	$Sc = 10 L$	2
361	During the propulsion trials of the ships are determined:	the elements of the turning effect	the speed components	the heeling capabilities of the vessel	the corrections of the echo sounder and radar	1
362	The number of runs and gibes at speed trials depend on :	the loading condition of the vessel	the diagram and the nature of the currents in the trial area	the number of ship propellers	the number of rudders of the ship	1
363	The length of a particular run at speed trials of the ship depends on :	the expected speed	the expected speed of the current	the expected wind speed	the expected wave height	1
364	The project length of a particular run S_j at speed trials of the ship is practically calculated by the formula:	$S_j = V : 12$	$S_j = V : 14$	$S_j = V : 3,14$	$S_j = V : 57,3$	1
365	During speed trials the vessel is steering her course :	by a gyrocompass	by a magnetic compass	along the line of the equal distance to two landmarks	by the readings of the GPS receiver	3

366	Speed trials are carried out for revolutions at minimum :	7 modes	5 modes	11 modes	24 modes	1
367	A board with the manoeuvrability characteristics of the vessel as per IMO standards should be placed at an apparent place in :	the chart room	the wheelhouse	the master's cabin	the engine control room	2
368	The errors in the data from the ship radar during manoeuvring affect the accuracy of defining:	CPA and TCPA only	target course and target speed only	CPA and target speed only	CPA, TCPA, target course and target speed	4
369	When sailing in a narrow waters or a fairway, as far as it is safe and possible, the ship should keep course:	near the outer limit of the narrow water or fairway which lies on her starboard	near the outer limit of the narrow water or fairway which lies on her port side	in the middle of the narrow water or fairway	to the deepest part of the narrow water or fairway	3
370	Can the ship enter the separation zone of the traffic separation scheme?	never	in case of extreme necessity, avoiding immediate danger	Yes, if she is a fishing vessel	yes, if there are no other ships	2
371	A vessel not using a traffic separation scheme should keep her course:	at the maximum distance from it	near to the outer limit of the traffic separation scheme, which lies on her starboard	close to the outer limit of the traffic separation scheme, following the general direction of the traffic	close to the outer limit of the traffic separation scheme, which is on her port side	3
372	When the wing-in-ground vessel is taking off or landing:	small vessels should keep clear and should not hinder her manoeuvre	the rules for power-driven vessel are applied	the other ships should keep clear and should not hinder her manoeuvre	she should keep clear of other vessels and should not hinder their manoeuvre	3

373	When a hovercraft does not sail in displacement mode, she must:	exhibit the lights and shapes prescribed for the respective size of a power-driven vessel	in addition to the lights prescribed for the respective size of a power-driven vessel, exhibit an all-round flashing yellow light	in addition to the lights prescribed for the respective size of a power-driven vessel, exhibit two all-round flashing yellow lights	in addition to the lights prescribed for the respective size of a power-driven vessel, exhibit an all-round flashing red light	2
374	A wing-in-ground ship, at night must exhibit the following lights:	in addition to the lights prescribed for a power-driven vessel underway, a bright all-round rapidly flashing red light in all modes of sailing	in addition to the lights prescribed for the respective size of a power-driven vessel, an all-round flashing yellow light	in addition to the lights prescribed for a power-driven vessel underway, a bright all-round rapidly flashing red light when taking off, landing or flying over the water	in addition to the lights prescribed for a power-driven vessel underway, fore and aft, two bright all-round rapidly flashing blue lights in all modes of sailing	3
375	When a hovercraft sails in displacement mode, she must:	in addition to the lights prescribed for the respective size of a power-driven vessel, exhibit an all-round flashing yellow light	exhibit the lights and shapes prescribed for the respective size of a power-driven vessel	exhibit the lights and shapes prescribed for the respective size of a power-driven vessel, as well as an all-round, rapidly flashing red light	in addition to the lights, prescribed for a power-driven vessel underway, fore and aft, two bright all-round rapidly flashing blue lights, in all sailing modes	1
376	When manoeuvring for berthing, the direction and movement of the tugs are defined by	the masters of the tugs	the master of the serviced ship	the VTS operator	the stevedores on the quay	2
377	If the propulsion of your ship is a pitch propeller and your speed is "Full ahead" you can:	give emergency astern only after stopping and reversing the main engine	give emergency astern without stopping and reversing the main engine	give emergency astern only if you gradually reduce the revolutions of the main engine	give emergency astern only after turning on the generator for emergency power supply/EDG/	1

378	If the propulsion of your ship is a fixed propeller without reversible coupling and your speed is "Full ahead" you can:	give emergency astern only if you gradually reduce the revolutions of the main engine	give emergency astern without stopping and reversing the main engine	give emergency astern only after turning on the generator for emergency power supply/EDG/	give emergency astern only after stopping and reversing the main engine	4
379	If the propulsion of your ship is a pitch propeller you can:	give a "stop" without changing the speed of the main engine	give a "stop" after stopping the main engine	give a "stop" after stopping the main engine and rudder in position midships	give a "stop" after stopping the main engine and turning on the fire pump	1
380	If the propulsion of your ship is a fixed propeller you can:	give a "stop" without changing the revolutions of the main engine	give a "stop" after stopping the main engine	give a "stop" after stopping the main engine and turning on the fire pump	give a "stop" without changing the revolutions of the main engine and giving the rudder hard to port / hard to starboard	2
381	If the propulsion of your ship is a fixed propeller with reversible coupling you can:	give a "stop" without changing the revolutions of the main engine	give a "stop" after reducing the revolutions of the main engine	give a "stop" without changing the revolutions of the main engine and giving the rudder hard to port / hard to starboard	give a "stop" without changing the revolutions of the main engine, but turning on the fire pump.	2
382	The embarking of the pilot on the bridge:	releases the master of the ship from the responsibility to navigate the ship.	does not relieve the master of the ship from the responsibility to navigate the ship.	is followed by negotiation of the responsibilities for navigation of the vessel	the responsibility for navigating the ship is joint	2
383	Hot work repairs on the deck of the ship are carried out:	only with the permission and knowledge of the master	only with the permission and knowledge of chief engineer	only with the permission and knowledge of the watchkeeping engineer	only with the permission of the person responsible for the procedures from the company and the OOW	4
384	Upon loading of deck cargo, the OOW should:	provide visibility for the helmsman in a sector of 30 degrees bow	provide visibility for the helmsman in a sector of 80 degrees bow	provide visibility for the helmsman in a sector of 45 degrees bow	provide visibility for the helmsman in a sector of 60 degrees on each side of the bow	4

385	Upon loading of the vessel, the OOW should:	provide visibility forward of the bow more than two ship lengths or 500 m	provide visibility forward of the bow more than two ship lengths or 1000 m	provide visibility forward of the bow more than one ship length or 250 m	provide visibility forward of the bow more than one ship length or 2 cables	2
386	When the ship is underway or at anchor, objects or substances can be thrown overboard only:	with the knowledge and permission of OOW	upon notification of the master	when the respective crew member considers this legal	according to instructions of the shipowner	3
387	Tidal current is considered to be constant for:	0,5 hour	1 hour	1,5 hours	6 hours	2
388	Height of the tide is:	the actual level measured from the chart datum	the actual level measured from the bottom of the sea	the actual level according to the average tide	the highest level that can be reached in a given area	1
389	A sign of an approaching tropical cyclone is:	a strong swell in the direction of the wind and rapid reduction in the pressure	stabilization of the pressure	absence of wind and waves and gradual reduction of the pressure	a strong swell in a direction other than the direction of the wind and rapid reduction in the pressure	4
390	The main signs of an approaching tropical cyclone are:	increase in pressure, decrease in temperature, ceasing of the wind	rapid reduction in pressure, increasing wind, appearance of swell	maintaining the pressure, the occurrence of cirrus clouds, overlapping direction of the wind and waves	rapid reduction in pressure, the wind subsides, the occurrence of wind waves	2
391	What is the type of tide at new moon and full moon?	at apogee	at neaps	at springs	low water	3

392	A sign of an approaching tropical cyclone is:	strong swell in the direction of the wind and rapid reduction in pressure	strong swell in a direction different from the wind and rapid fall in pressure	absence of wind and waves and gradual decrease in pressure	light wind, rough seas and rapid reduction in pressure	2
393	Meteorological elements are:	wind, air temperature and air pressure	clouds, rain and fog	waves, water temperature and storms	wind, waves, clouds and fog	1
394	Meteorological phenomena are:	storms, rainfall, visibility and humidity of the air	rainfall, clouds, storms and fog	visibility, humidity and pressure	wind, waves, lightning and rainfall	2
395	An aspiration psychrometer is used for measuring:	the rate of water vapor	relative humidity	the rate of water vapor and relative humidity	absolute humidity	2
396	An anemometer is used for measuring:	wind speed	direction of the wind	visibility	the change in the acceleration of the wind	1
397	An aneroid barometer is used for:	night visibility	continuous recording of atmospheric pressure	periodical recording of atmospheric pressure	measuring instantaneous atmospheric pressure	4
398	A squall is:	a sudden violent gust of wind	a small-scale gust of wind	reduction of the force of the wind	calm	1

399	The weather report contains:	three parts	four parts	six parts	no parts	3
400	A gale warning is broadcasted:	In English only	In English or French	in English, French, Spanish or the International signal code	in Bulgarian or Russian	3
401	Full weather forecast is made using:	facsimile prognostic charts	facsimile charts with the actual data	both types of facsimile charts	without using charts	3
402	Local signs of the weather	are of great importance	are of no importance	are not necessary to monitor	are important only to fishing vessels	1
403	Wind force is greater when the isobars on a facsimile map are:	at a great distance from each other	at small a distance from each other	at various distances from each other	parallel lines	2
404	The wave height depends on:	the duration of the wind	the stability of the wind direction and the fetch	the duration, force, and stability of the wind direction and the fetch	presence of low atmospheric pressure and wind force	3
405	The direction of current is determined by:	the direction to which it flows	the direction from which it flows	both ways	the hemisphere and direction to which it flows	1

406	Seabed topography and coastline:	do not affect the static and dynamic characteristics of the current	affect the current	affect only the static characteristics of current	affect only the absence of swell	2
407	Rising tide formation force causes current:	in all water layers	in the layer to half depth	in the navigation water layer	in the surface layer of the water	1
408	Currents are caused by:	primary forces (density, pressure differences, etc.).	secondary forces (friction, Coriolis effect, etc.).	primary and secondary forces	the effect of moon's gravity on magnitude of earth's gravity	3
409	Wind current depends on:	only the direction and the speed of the wind	only the duration of the wind	the direction, speed and duration of the wind, the fetch and the depth of the water in the area	the presence of wind	3
410	Tidal current is considered to be constant for:	0,5 hrs	1 hr	1,5hrs	15 minutes	2
411	Steepness of the wave is:	The ratio between the height of the wave and its length	the ratio between the amplitude of the wave and its length	the ratio between the height of the wave and its amplitude	the ratio between the length of the wave and its height	1
412	Sea waves are affected by:	the direction and speed of the wind only	the duration of the wind and the fetch	the seabed topography	the direction of the wind, the duration of the wind and fetch	4

413	Direction of wave propagation is:	the direction from which the waves move	direction to which the waves move	determined both ways	dependent on the hemisphere and the direction from which the waves move	1
414	Sea state is measured:	from 0 to 9	from 0 to 12	from 0 to 7	from 0 to infinity	1
415	The force of gravity of the water is caused by:	the moon and the planets	the sun and the planets.	the moon and the sSun.	the solar system	3
416	Phase inequalities of the tide are caused by:	change in the phase of the moon	change of the declination of the Sun	change of the declination of the Sun and the Moon	the influence of the near-Earth planets	1
417	Diurnal inequalities of the tide are caused by:	changes in the phase of the moon	change of the declination of the moon	change of the distance between the earth and celestial bodies (Moon, Sun)	change of the declination of the Sun	2
418	Parallax inequalities of the tide are caused by:	change in the phase of the moon	change of the declination of the sun	change of the distance between the earth and celestial bodies (Moon, Sun)	change of the declination of the Moon	3
419	Predicting tides is practically done by:	the method of comparison	Admiralty method	both Admiralty and comparison	neither one of the three	3

420	Height of the tide is:	the actual level measured from the chart datum	the actual level measured from the seabed	the actual level according to mean tide	the mean value between the high and low tide	1
421	A sign of an approaching tropical cyclone is:	a heavy swell in a direction different from the direction of the wind and a rapid decrease in pressure	a heavy swell in the direction of the wind and a rapid decrease in pressure	absence of wind and waves and gradual decrease in pressure	rain, absence of wind and sharp increase in pressure	1
422	Tropical cyclones in the Northern Hemisphere generally move in the following direction:	beginning NW, then in latitude of 25° - 30° turning NE	beginning NE, then in latitude of 25° - 30° turning NW	beginning NE, then in latitude of 45° - 55° turning NW	beginning SW, then in latitude of 25° - 30° turning SE	1
423	Tropical cyclones in the Southern Hemisphere generally move in the following direction:	beginning NW, then in latitude of 25° - 30° turning NE	beginning SW, then in latitude of 25° - 30° turning SE	beginning SE, then in latitude of 25° - 30° turning SW	beginning W, then in latitude of 25° - 30° turning SE	2
424	Wind speed is:	directly proportional to the change in temperature of the air	directly proportional to the pressure gradient	inversely proportional to the change of barometric pressure	inversely proportional to the change in the absolute humidity	2
425	Period of high or low tide during which no change in the height of the water is called:	range of tide	plane of the tide	standof the tide	change of the tide	3
426	The direction of the surface wind is:	directly from high to low pressure	directly from low to high pressure	from high to low pressure with deviation caused by the Earth's rotation	from low to high pressure with deviation caused by the Earth's rotation	3

427	Stand of the tide is the time:	when a vertical rise or fall of the tide is stopped	between flood tide and ebb-tide	at high tide	when the actual depth of water is equal to the depth on the chart	1
428	The wind direction may be determined by observation of the following signs, excluding:	low clouds	swell	white caps on the waves	increase of ripples	3
429	Spring tides are tides which:	have low tide lower than normal and high tide higher than normal	have low tide higher than normal and high tide lower than normal	are irregular	occur in spring	1
430	What does the term "tide" refer to?	the horizontal movement of the water	the vertical movement of the water	combined movement of the water	water salinity	2
431	Which wind changes direction during different seasons?	monsoon	bora	trade wind	secondary wind	1
432	Pilot on the bridge:	relieves the ship's master of the responsibility for the management of ship	relieves watchkeeping mate of the ship from liability for the safety of the ship	is followed by negotiation of powers and division of responsibility for management of the ship	does not relieve the master of the ship of the responsibility for the management of ship	4
433	When navigating in ice, the smallest chance of breaking the blades of the screws or damage is when:	the ship is reversing	the engine is stopped	the screw rotates at low speed	the screw is with controllable pitch	1

434	A ground with the best holding nature is:	sand	gravel and stones	clay	shells and clams	1
435	Pilot card is completed and signed by:	master of the ship and delivered to the pilot after completing the maneuver	master of the ship and delivered to the agent	pilot and delivered to the master of the ship for signature and seal	master of the ship and delivered to the pilot before starting the maneuver	4
436	At what height of the sides must a combined pilot ladder be rigged?	over 6 meters	over 9 meters	over 12 meters	no such is rigged	2
437	The length of the towing line is:	distance from the bow of the tug to the bow of the towed object	distance from the stern of the tug to the bow of the towed object	distance from the stern of the tug to the stern of the towed object	distance from the fore-castle of the tug to the stern of the towed object	2
438	Grid type "Devi" is installed on:	vent pipes on tanks with fuel oil	volumetric throats on ballast tanks	vent pipes of storage for vegetables	output mufflers on diesel generators	1
439	What is important to do when plotting the position on the chart by GPS?	To read position correctly.	To plot position correctly.	To make sure that the chart and GPS have the same datum.	To make sure that the chart is corrected.	3
440	What is most important when transferring passage plan to other navigation systems?	Both systems have the same producer.	Both systems use the same chart datum.	Both systems are approved by classification societies.	Both systems operate according to its specification.	2

441	When should the passage plan be made?	During the passage.	Before departure	after departure	Before the pilot disembarks.	2
442	What is the shortest distance between two points?	Rhumb line	Composite great circle	Great circle	None of the above	3
443	Who is responsible for the passage plan?	The person who has drawn the plan.	Master.	Navigation officer.	Shipowner.	2
444	Can RNC charts be used for planning a passage?	Only together with paper charts.	Yes	No	Only if approved by the flag administration.	1
445	Can you to make a passage plan on ECDIS?	Yes	No	Only if approved by the flag administration.	Only if approved by the owner.	3
446	In sailing along the coast GPS position should be checked by?	Visual determining the position.	Determining the position by radar.	Buoys and sea marks.	Visual and radar determination of the position.	4
447	What are the duties of the helmsman?	He is steering the ship.	He is watching the helm.	He is working like hell.	He is looking after the men.	1

448	What are the duties of the look-out?	He is looking for navigational dangers.	He is appraising the risks.	He is looking for safe actions.	He is looking after the proper course of the ship.	1
449	When does the second mate have to call the master?	When something unusual happened and 30 minutes before the pilot's position.	As usual.	When something happens to a member of the crew.	30 minutes before the pilot's position.	1
450	When should we make operational checks on navigation equipment?	Regularly, when the ship is preparing for departure and entry into port.	As it is often possible.	When we notice problems.	When time allows.	1
451	When should a navigation officer on watch break the passage plan, what should he do?	Make a log entry.	Inform the master.	No special arrangements.	Check the new plan.	2
452	Your ship is drifting at sea due to a problem with the engine. What would you do in this situation?	Will use the opportunity to determine the course and speed of drift.	Will immediately call the company.	Will ask the chief engineer when the engine will be ready.	Will rest until the engine is ready.	1
453	Can the deck officer on the bridge be a lookout?	No	Only in good visibility	Only during daylight hours.	Only during daylight hours when visibility, traffic, etc. are safe.	4
454	When sailing on autopilot, how often should you check the rudder by hand?	Every day.	When time allows	At least once a watch.	There is no need to be checked.	3

455	Should the watch officer on the bridge check the whole passage plan?	Yes.	No	Just planning the passage along the coast.	Only if ECDIS is not used.	3
456	What is the search pattern when one ship and one aircraft participate in the search?	Patterton	Coordinated Crab	SOLAS	Flight Cross	4
457	You sail close to shore when you are informed that the engine has stopped. It takes a few hours to deal with the problem. What would you do?	Will call the chief engineer and warn him to hurry.	Will announce alarm of the ship.	In the fastest possible way will determine how the ship is drifting to assess whether there is a risk.	Will call the company and will ask for instructions.	3
458	You are on watch. There is a man overboard. What maneuver will you use?	Williamson Turn	Scharnow Turn	Direct Turn	Evinrude Turn	1
459	You are on watch. There is a crewmember missing on board. What maneuver will you use?	Scharnow Turn	Williamson Turn	Direct Turn	Evinrude Turn	2
460	What flag signal is used by ships in response to a request from aircraft to participate in the rescue operation?	U	Y	Answering Pendant	A	1
461	You sail in shallow water by 15% Under Keel Clearance. How will the diameter of turning circle of the ship change compared to that in deep water?	The diameter will decrease	Diameter will increase	Diameter will not change	It will decrease on the portside and will increase on the stbd side.	3

462	You sail in shallow water by 15% Under Keel Clearance. How will the course of the ship change at full astern from full ahead compared to that in deep water?	Course will change most probably with large deviation.	Course will not change.	Course will change slightly.	At the beginning the course will change significantly, and then it will continue to change very slowly.	4
463	You sail in shallow water by 15% Under Keel Clearance. How will the distance needed to stop the ship change compared to that in deep water?	Required distance to stop the ship will be reduced.	Required distance to stop the ship will increase.	Required distance to stop the ship will not change.	Required distance to stop the vessel will increase by one length of the ship .	3
464	You sail in shallow water by 15% Under Keel Clearance. How will the speed of the ship change at full speed compared to that in deep water?	Speed will increase	The speed will decrease	There will not change	Revolutions will fall by 15% from full.	3
465	You drift with loaded VLCC at sea. You have determined the course and speed of drift. Can you do something to change the speed and direction of drift?	We could increase the trim sternwards as far as possible. This will most likely change course and speed of drift.	No, nothing can be done.	We must wait and see what happen will happen.	We can use the rudder despite the engine does not work.	4
466	You drift with loaded VLCC and determine the direction of drift SSE. If you were under ballast would it be in the same direction?	No, the direction of drift when the ship is under ballast may be quite different.	Yes, the direction of the drift is the same.	If the ship is loaded with ballast or not, this does not influence the direction of drift.	Under ballast the ship will drift more towards E.	3
467	Why is it important to determine how your ship drifts in different weather conditions?	To know how far you will drift for a certain time.	To save fuel, by moving with engine stopped when possible.	To determine that there is a risk of stranding or collision with objects during the drift.	To know how much time you have available before you call for help.	3
468	What form does usually the hull of the ship have that is not resistant to maintain course?	A ship with a length to width ratio of less than 7	A ship with a length to width ratio of less than 5,5	A ship with a length to width ratio of higher than 5,5	Ship with a long and wide hull	3

469	What shape does usually the hull of the ship have in order to maintain course?	Ship is short and with narrow hull	Ship is long and with narrow hull	Ship is short and with wide hull	Ship is long and with wide hull	2
470	What does it mean "Steady so"?	Keep steady course.	Calm down your temper.	Tight the ropes.	Keep the rudder steady so.	1
471	What does it mean "Hard Starboard"?	Put the rudder full starboard.	Do not come to port.	Hard rocks on starboard.	A ship is seen to starboard.	1
472	What should be done to help a life saving craft to stay safe on board the ship?	To use winch.	To keep the ship on course.	To stop the ship	To send clewline overboard from the forecandle to the stern of the ship.	1
473	What is the most typical for a ship to maintain the course?	Ship remains on course no matter how rudder is turned.	When you put rudder amidships, the ship does not deviate from the course.	When rudder turns, the ship continues the turn after the return of rudder amidships	When the rudder turns, some time passes until the ship starts to turn.	2
474	Which document of IMO gives instructions for search and rescue?	EPIRB	RASSO	IAMSAR	AMVER	3
475	What is true for a ship that is not able to keep the course?	When you put the rudder amidships, the ship does not deviate from the course.	When rudder turns, the ship's turn continues after the rudder is returned amidships, even faster.	The ship remains on course no matter how you turn the rudder.	When you turn the rudder some time passes until the ship starts to turn.	2

476	Which is the most favourable course when lowering a lifeboat / man overboard?	Wind and waves astern.	The ship does not move through the water.	The ship maintains course about 30 degrees against a wind / wave.	The ship keeps a sideways wind / wave.	3
477	Which is the correct definition for "lee side"?	Port side.	Starboard side.	The side of the wind.	The side opposite the wind.	4
478	Maximum deviation of rudder is 35 degrees. Is this the most effective rudder position?	No, the most effective position of the rudder is from 25 to 30 degrees, because at 35 degrees rudder "is stalling".	No, the most effective position of the rudder is from 10 to 20 degrees	Yes, the rudder is most effective at 35 degrees deviation.	No, the rudder is most effective at small deviations.	1
479	On the diagram is shown that the headway distance from full ahead is 2,000 m What will the headway distance be in shallow water?	Larger	Shorter	No change	About 1500 meters.	1
480	Do you think that the trim of the ship has an impact on her maneuverability?	Yes, the maneuverability of the ship is generally better with a trim at the stern.	No, maneuverability of the vessel will not change by the trim.	Yes, the maneuverability of the ship is generally better with a trim at the head.	No, usually the best is the ship not to have a trim.	1
481	What is the main task of VTS?	To decrease the value of port operations.	To provide information.	To increase the safety of all ships in the area.	To increase the safety of ships participating in VTS.	3
482	«MRCC» is :	The master of a SAR unit who coordinates on scene search and rescue operations	A SAR coordinating centre	The master of a merchant ship who coordinates on scene search and rescue operations	A coast station	2

483	«OSC» is :	A SAR sub centre	A SAR coordinating centre	The master of a ship who coordinates on scene search and rescue operations	A coast station	3
484	Distress call was accidentally broadcast with your MF DSC equipment. Which of the following is the correct way to cancel a false distress alert?	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Send an all stations distress priority MF DSC call - 4. Make broadcast on 2182 kHz ""Mayday all stations..."" and cancel the false distress alert."	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Send an all stations urgent priority MF DSC call - 4. Make broadcast on 2182 kHz ""PAN PAN all stations..."" and cancel the false distress alert."	1. Switch off the transmitter - 2. Switch equipment on - 3. Send a selective distress priority MF DSC call to the nearest MRCC- 4. Inform that a false distress alert has been transmitted	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Make broadcast on 2182 kHz ""All stations..."" and cancel the false distress alert."	4
485	Distress call was accidentally broadcast to your VHF DSC equipment. Which of the following is the correct way to cancel a false distress alert?	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Send an all stations distress priority VHF DSC call - 4. Make broadcast on channel 16 ""Mayday all stations..."" and cancel the false distress alert."	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Send an all stations urgent priority VHF DSC call - 4. Make broadcast on channel 16 ""PAN PAN all stations..."" and cancel the false distress alert."	"1. Switch off the transmitter - 2. Switch equipment on - 3. Send a selective distress priority VHF DSC call to the nearest MRCC- 4. Inform it that a false distress alert has been transmitted"	" 1. Switch off the transmitter - 2. Switch equipment on - 3. Make broadcast on channel 16 ""All stations..."" and cancel the false distress alert."	4
486	How do you start a message to cancel by mistake sent distress call on your VHF DSC equipment?	" MAYDAY - All Stations - This is "SAINT-ROMAIN""	" PAN PAN - All Stations - This is "SAINT-ROMAIN""	" SECURITE - All Stations - This is "SAINT-ROMAIN""	" All Stations - This is "SAINT-ROMAIN""	4
487	What does the abbreviation "MRCC" mean?	Maritime Research Coordinating Centre	Maritime Rescue Coordinating Centre	Mobile Rescue Coordinating Centre	Maritime Retransmission Coordinating Centre	2
488	What will you do after you receive MF DSC DISTRESS call?	Will send immediately DSC DISTRESS ACKNOWLEDGEMENT call.	Will send immediately DSC DISTRESS RELAY call.	Will organize a watch on channel 2187,5 KHz	Will organize a watch on channel 2182 KHz	4

489	What will you do after you receive VHF DSC DISTRESS call ?	Will send immediately DSC DISTRESS ACKNOWLEDGEMENT call.	Will send immediately DSC DISTRESS RELAY call.	Will organize a watch on channel 16	Will organize a watch on channel 1.	3
490	What search method is used when one ship is involved?	Sector System	Square System	Single System	Lonely System	2
491	What search method is used when two ships participate?	Cross System	Parallel System	Circle System	Triangle System	2
492	What are the three Search and Rescue urgency phases	Search - Alert - Rescue	Search - Assistance - Rescue	Uncertainty - Alert - Distress	Uncertainty - Search - Rescue	3
493	Which is one of the methods used by aircraft to ask for a ship to participate in the rescue operation?	To give a smoke signal	To light the landing lights	To circle around the ship	To descend from high	3
494	Ship-to-ship search and rescue communication should be carried out primarily by?	VHF	MF	Satellite	VHF and MF	4
495	EPIRB has been activated by mistake. Which of the following is the correct way to cancel a false distress alert?	Send a distress priority VHF DSC call and make an announcement to all stations	Call the nearest coast radio station and tell them about the transmitted fake signal.	Call the LUT and inform them.	Send a message to all stations on VHF channel 16.	2

496	What is the probable position of the ship in distress called?	Zero-Point	R-Point	D-Point	S-Point	1
497	What do we call the main center for coordinating the rescue operations?	Maritime Rescue Co-ordination Centre	Rescue Co-ordination Centre	Ship Distress Centre	Emergency Ship Distress Centre	2
498	What do we call the ship, which has a leading role in the rescue?	Local Rescue Commander	On Scene Commander	Commander of Rescue Operation	Commander of Operation	2
499	What Flag signalling must CSS (Co-ordination Surface Search) ship show?	FR	RC	CSS	CC	1
500	What is the main duty of the master of the ship when he receives a distress signal from a source close to the ship?	To inform the office of the company.	To proceed at full speed to the position of distressed object.	To proceed to the nearest coast radio station.	To check whether the ship has enough fuel for rescue operations.	2
501	What does the abbreviation CSS mean?	Co-ordinator Surface Search	Commander Ship Search	Control Center of Survivors	Co-ordination Ship Search	1
502	During the search and rescue operation an aircraft crosses the wake of your ship near the stern at low height. What does it mean if the craft moves its wings up down?	Stay where and wait for next instructions.	Follow me in the direction of the ship in distress.	Assistance by your ship is not necessary.	Contact me on channel 16 as you do not respond to my calls.	2

503	How are distressed people in critical condition picked up from the water on board the ship?	By a net.	By a lifebuoy.	By a heaving line.	By a clewline.	1
504	There is an explicit obligation to help people in distress, but must the master assist in the towage of a ship?	Master has no obligation to assist in the towage of a ship.	Master is obliged if he receives an order from the rescue co-ordinatsionen center.	Master is obliged, but only when the weather permits.	Master is obliged to render any help to rescue and tow a vessel in distress.	1
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