Operative level			
04 – Ship manoeuvring			
Questions			**Correct answer**
Ite	B/D	Module 1 – Manoeuvring theory	Module 1
1.	B	Side operation of a propeller in a ship with a clockwise propeller operating forward is shown in the following manner, provided the rudder is in the neutral position: a) The ship nose has a tendency to move left b) The ship nose has a tendency to move right c) The ship maintains unchanged course	A
2.	B	A pivot point of a ship moving forwards is located approximately: a) in 1/4 - 1/3 distance from the stern b) in 1/4 - 1/3 distance from the nose c) near the middle of the length of the ship	B
3.	B	Advance and tactical diameter turning circle refer to: a) turning circle parameters defined for maximum rudder angle b) ship location at course change respectively by 90° and 180° during turning circle c) maximum distances of respective ship trajectory points from the initial position	B
4.	B	A ship with a superstructure at the stern moving forward will try to align in the following manner in relation to the wind: a) stern towards the wind b) beam towards the wind c) nose towards the wind	C
5.	B	Braking with a CW propulsion from a full ahead sea speed must ensure, acc. to resolution by IMO (L - ship length), for a ship which is not considered by the administration to be a large size ship: a) braking distance measured along the trajectory of the ship centre, as a rule no longer than approx. 15L b) distance measured in the direction of the initial course to the stopping place no greater than 15L (in exceptional cases 20L) c) braking distance in no case longer than 20L	A
6.	B	A wheelhouse poster on braking distance should include, in accordance with the IMO resolution: a) the time and distance of total stoppage of the ship, at least in a ballasted state b) transient characteristics (distance-temporal) of speed reduction, taking into account the initial speed an propulsion setpoint c) results of an attempt at rudder cycling	B
7.	B	What is the effect of shallow water on the diameter of turning circle: a) it has no impact b) diameter of turning circle increases c) diameter of turning circle is smaller in shallow water	B

8.	B	What will be the impact of rapid transition from a deep basin to a shallow basin on ship manoeuvrability: a) manoeuvrability will deteriorate and the ship may get off the course b) no impact c) manoeuvrability will improve	A

9.	B	How to carry out a manoeuvre of passing a ship approaching with an opposite course in a canal:
		   a) such a manoeuvre is dangerous and should not be carried out
		   b) ships constantly move near their right side of the canal, correcting the impact of the channel wall without the need to take into account the interaction between ships
		   c) the ships move in the centre of a channel until they have to leave its axis in order to carry out a manoeuvre, correct the initial push of noses when passing each other and the subsequent pull, speed reduction recommended in order to reduce the intensity of interactions
			C

10.	B	When passing a sharp curve in a river, the ship should:
		   a) keep close to the centre of the river
		   b) keep closer to the outer bank in order to utilise the phenomenon of nose push and the deeper part of the river bed to carry out a manoeuvre safely
		   c) keep close to the inner bank
			B

11.	B	When moving near shallow water, the following phenomenon may be observed:
		   a) ship nose is pushed towards deep water
		   b) ship nose is pulled towards shallow water
		   c) the ship does not react
			A

12.	B	An increase in ship speed and relevant adjustment of the propulsion set point causes:
		   a) an increase in the diameter of turning circle
		   b) a decrease in the diameter of turning circle due to increased angular velocity
		   c) practical maintenance of the diameter of turning circle with proportional shortening of the manoeuvre duration
			C

13.	B	During sailing in a channel, deviation of the ship from the channel axis causes flow asymmetry which causes the following phenomena:
		   a) ship nose is dragged to a bank and the stern is pushed off
		   b) ship nose is pushed from one bank and the stern is dragged to the opposite bank
			B

14.	D	During active braking that takes place in conditions of uniform change of ship speed, that is when there is a constant result value of braking force, the section of the distance passed by the ship that corresponds to the uniform change of speed, e.g. equal to 2 knots are:
		   a) constant
		   b) shortest at the final stage
		   c) longest at the final stage
			B

15.	D	When moving backwards. a typical ship with a superstructure at a stern, will have a tendency to align itself: a) nose towards the wind b) beam towards the wind c) stern towards the wind	A
16.	B	Advance in turning circle in shallow water conditions, compared to deep water is: a) much greater, proportional to the determined diameter of turning circle b) much lower due to increase in resistance c) remains largely the same.	C
17.	B	Impact of the bank in a channel can be seen in: a) the fact that the ship turns towards the axis of the fairway b) the fact that the ship is pushed from the nearest bank c) the fact that the ship nose is dragged to the nearest bank	A
18.	B	Compared to the manoeuvre of overtaking, passing ships in a channel at the same distances between ships and similar speed level is: a) safer b) equally dangerous c) more dangerous	A
19.	B	The most dangerous phase of overtaking in a channel is the middle phase of a manoeuvre, where two ships are besides one another and when: a) the overtaking ship turns towards the overtaken one b) the overtaking ship turns away from the overtaken one c) strong pull between sides occurs at small ship turns	C
20.	B	When passing a stopped ship, much greater forces and interaction moments occur: a) at the moving ship (the one that has speed) b) at the stopped ship c) equal impacts, due to the Newton's third law	B
Item	B/D	Module 2 – Manoeuvring practice	
1.	B	Visual assessment of the state of motion in the aspect of distance, course and speed during manoeuvring on restricted waters: a) has only downsides and technical devices should be used instead (e.g. radar, ECDIS, GPS receiver and other) b) insufficiently accurate c) is reliable and pretty accurate	C

2.	B	Navigator's manoeuvre decisions depend mostly from: a) the distance between the ship and the navigational objects in relation to its length and/or width b) absolute distances (e.g. metres, cable lengths), independently from the ship size c) times of performing ship turning circle or stopping	A
3.	B	When berthing a ship which is supposed to approach the shore without a tug, in conditions of significant currents one should: a) approach by the left side b) always approach nose against the current c) it does not matter whether the ship approaches with the current or against the current	B
4.	B	The condition of obtaining large trajectory curve at restricted waters when manoeuvring with a rudder is: a) low speed of advance, naturally resulting in smaller turning radii b) high speed of advance, yielding high turning angular velocity c) small approach speed with simultaneous visible increase of the propulsion setpoint	C
5.	D	The minimum length of an anchor chain should be: a) defined for the given ship during builder's trials b) three times the depth of the basin c) four times the depth of the basin plus the height of the hawspipe above the water surface	C
6.	B	In order to equal the impact of the bank, an important part is played by: a) only the stern rudder, with possible operation of propulsion b) stern rudder and hull leeway angle c) backwards operation of propulsion and side action of the screw	B
7.	B	In the course of the Williamson turn, the course change angle where the moment of giving a second order to the rudder (that is putting it at the side opposite in relation to the direction of initial angle) equals: a) 60° b) is individual for the ship and depends on the turn stoppage capacity c) 35°	B
8.	B	Distance between the initial position and the position of return to the fairway track when performing a Williamson turn, as an instant action: a) is too small for the manoeuvre to succeed b) equals approx. 5 cable lengths c) has the value of approx. 5 ship lengths and is sufficient to stop a ship that sails initially with the speed of 15 knots	C

9.	B	From the resistance point of view, the weakest link in the anchor rigging is:
		   a) a windlass
		   b) an anchor
		   c) a chain
			A

10.	B	When attaching mooring lines to the ship, in the case of uniform running of a fibre and steel ropes from the same hawspipe in order to have the same role, e.g. a breast rope or a spring:
		   a) advantages and disadvantages of both rope types are optimally evened out
		   b) there is the greatest strain and risk of breaking for the fibre rope
		   c) there is a much greater strain and risk of breaking for the steel rope
			C