

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competency	Criteria for evaluating competency
<p style="text-align: center;"><b>CHARTWORK</b></p> <p>Total Marks: 150</p> <p>Candidates must attempt ALL questions</p> <p>To achieve a PASS candidate must obtain at least 150 marks, i.e. 70%</p> <p>Time allocated: 2.30 hours</p>	<p>(a) Given variation and the deviation of the magnet[c compass or gyro error, to convert true courses into compass courses and vice versa. Given a sample of deviation, to extract the deviation hence to convert true courses into magnetic and compass courses. To find the compass course between two positions. The effect of current on speed. Allowance for leeway. Given compass course steered, the speed of the ship and direction and rate of the current, to find the true course _ made good. To find the course to steer allowing for a current. Given the course steered and distance run, to determine the set rate of the current experienced between two positions;</p> <p>(b) To fix a position on a chart by simultaneous cross hearings, by</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ol style="list-style-type: none"> <li>1. Approved in-service experience,</li> <li>2. Approved training ship experience</li> <li>3. Approved simulator training where appropriate.</li> <li>4. Approved laboratory equipment training</li> </ol> <p>Using charts, electronic navigation equipment, echo-sounding equipment, compass</p>	<p>The information obtained from navigational charts and publications is relevant, interpreted correctly and properly applied. All potential navigational hazards are accurately identified</p> <p>The primary method of fixing the ship’s position is the most appropriate to the prevailing circumstances and conditions. The position is determined within the limits of acceptable instruments/system errors.</p> <p>The reliability of the information obtained from the primary method of position fixing is checked at appropriate intervals</p> <p>Calculations and measurements of navigational information are accurate.</p>

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p>bearing and range, by information from aids to navigation or by any combination, applying the necessary corrections. The use of lattice charts;</p> <p>(c) To fix the position by bearing of one or more objects with the run between, allowing for a current and to find the distance at which the ship will pass off a given point. The use of position lines obtained by any method, including terrestrial position lines and position circle. Use of transit bearings;</p> <p>(d) Elementary knowledge of passage planning and execution, landfalls in thick and clear weather. The selection of suitable anchorages, approaching anchorage and entering narrow waters. The use of clearing marks and horizontal and vertical danger angles. Distance of sighting lights;</p> <p>(e) To find the</p>		<p>The charts selected are the largest scale suitable for the area of navigation and charts are corrected in accordance with the latest information available.</p> <p>Errors in magnetic compass are determined and correctly applied to courses and bearings.</p>
--	---	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p>time and height of high and low water at Standard ports and at Secondary ports by tidal differences, using Admiralty Tide Tables. The use of tables and tide curves to find the time at which the tide reaches a specified height, the height of the tide at a given time and thence the approximate correction to be applied to soundings or to charted heights of shore objects;</p> <p>(f) The interpretation of a chart or plan; particularly the information given about Buoys, Lights, radio beacons and other navigational aids Depth and height contours; Tidal streams; Traffic lanes and separation zones. Recognition of the coast and radar responsive targets. Chart correction. Depth and nature of bottom. Use of sounding.</p>		
--	---	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competency	Criteria for evaluating competency
<p style="text-align: center;"><b><u>GENERAL SHIP KNOWLEDGE AND STABILITY</u></b></p> <p>Total Marks: 150</p> <p>Candidates must attempt ALL questions</p> <p>To achieve a PASS candidate must obtain at least 75 marks, i.e. 50%</p> <p>Time allocated: 2 hours.</p>	<p>General ideas on ship construction and on plans available on board ship. General pumping arrangements. General definition of main dimensions. The names of the principal parts of a ship;</p> <p>(b) General understanding of and calculations related to:</p> <p>Displacement; Deadweight; Buoyancy; Reserve buoyancy; understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy;</p> <p>Use of displacement and tonnes per centimeter immersion scales to determine weight of cargo or ballast from draughts of freeboard. Load line marks. Effect of density of water on draught and freeboard. Fresh water allowance.</p> <p>(c) (i) General understanding of</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <p>1. Approved in-service experience</p> <p>Approved simulator training where appropriate</p>	<p>Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice</p> <p>The stability conditions comply with the IMO intact stability criteria under all conditions of loading</p>

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p>and calculations related to:</p> <p>Centre of gravity;</p> <p>Centre of buoyancy;</p> <p>Metacentric height;</p> <p>Righting lever;</p> <p>Righting moment;</p> <p>(ii) The use of stability and hydrostatic data supplied to ships, including stability data in simplified form. The effect of adding and removing weights. The danger of slack tanks;</p> <p>(iii) Rigging a ship for loading and discharging cargo, the use of derricks, winches and cranes. "Lining up" pipelines on oil products carriers. The stowage and securing of cargoes including bulk cargoes. A knowledge of the safety precautions to be taken</p>		
--	--	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p>during the loading and discharging of bulk oil, chemicals and other dangerous commodities. Ventilation systems of holds and tanks.</p> <ul style="list-style-type: none"> <li>(d) General understanding and calculations of:               <ul style="list-style-type: none"> <li>(a) ship stresses;</li> <li>(b) transverse and longitudinal stability dry docking.</li> </ul> </li> </ul>		
--	--	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competency	Criteria for evaluating competency
<p style="text-align: center;"><b>NAVIGATION</b></p> <p>Total Marks: 150</p> <p>Candidates must attempt ALL questions</p> <p>To achieve a PASS candidate must obtain at least 105 marks, i.e. 70%.</p> <p>Time allocated: 2.30 hours.</p>	<p>Candidates will be required to have an understanding of the principles of navigation and spherical trigonometry. Candidates may use short method tables, star identifiers, plotting sheets for all calculations.</p> <p>(a) The use of the traverse tables to obtain the position of the vessel at any time given compass course, compass error (or variation and deviation) and the run recorded by log (or calculated by time and estimated speed) allowing for the effects of wind and current, if any;</p> <p>(b) (i) From an observation of a celestial body on the meridian, to find the latitude;</p> <p>(ii) From an observation of any celestial body out of the meridian, to find the direction of the position</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ol style="list-style-type: none"> <li>2. Approved in-service experience,</li> <li>3. Approved training ship experience</li> <li>4. Approved simulator training where appropriate.</li> <li>5. Approved laboratory equipment training</li> </ol>	

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate's Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p style="text-align: center;">line and a position through which it passes;</p> <ul style="list-style-type: none"> <li>(c) Detection of misrepresentation of electronic navigational information and methods of correction to obtain accurate position fixing;</li> <li>(d) To obtain a position by the combination of any two or more observations as in (b) with or without a run;</li> <li>(e) To find the true bearing of a celestial body, hence the compass error and, for a magnetic compass, the deviation, for the direction of the ship's head;</li> <li>(f) To calculate the approximate time (to the nearest minute) of the meridian passage of a celestial body;</li> <li>(g) To fix a vessel's position on a chart by two simultaneous position lines or position circles obtained from any</li> </ul>		
--	--	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate's Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<p>practical combination of terrestrial bearings, radio D.F. bearings, radar ranges and bearings horizontal and vertical sextant angles, depth contours and astronomical observations;</p> <p>(h) To obtain the best position from a cocked hat or diamond of error.</p>		
--	--	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competency	Criteria for evaluating competency
<p style="text-align: center;"><b>METEOROLOGY</b></p> <p>Total Marks: 60</p> <p>To achieve a PASS candidate must obtain at least 30 marks, i.e. 50%.</p> <p>Time: 1.30 hours.</p>	<p>The aneroid barometer: corrections to be applied;</p> <p>(b) The barograph: diurnal variation of barometric pressure;</p> <p>(c) Means of obtaining sea surface temperature and the use of this information;</p> <p>(d) The Beaufort wind scale and weather notation in use at sea, methods and estimating direction and force of wind at sea;</p> <p>(e) Relationship between pressure distribution and wind: by ballot's law;</p> <p>(f) A knowledge of the weather systems and seasonal patterns. Land and sea breezes;</p> <p>(g) Factors affecting visibility at sea;</p> <p>(h) A knowledge of the weather associated with the passage of a front;</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ol style="list-style-type: none"> <li>6. Approved in-service experience,</li> <li>7. Approved training ship experience</li> <li>8. Approved simulator training where appropriate.</li> <li>9. Approved laboratory equipment training</li> </ol>	<p>Meteorological information is correctly interpreted and applied.</p> <p>The likely weather conditions predicted for determined period are based on all available information</p> <p>Action taken to maintain safety of navigation minimize any risk to safety of the ship</p> <p>Reason for intended action are backed by statistical data and observations of the actual weather conditions</p>

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

	<ul style="list-style-type: none"> <li>(i) A knowledge of the weather associated with a tropical revolving storm: its probable movements: the rules for the avoidance of storms;</li> <li>(j) Recognition of the approach and development of a tropical revolving storm, forecasting the probable movement;</li> <li>(k) A knowledge of the weather information available to shipping. The interpretation and use of this information. Weather forecasting;</li> <li>(l) Ocean waves and swell. Measurement and behavior. A general understanding of the relationship between speed, length, period and height. Abnormal waves.</li> </ul>		
--	--	--	--

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competency	Criteria for evaluating competency
<p style="text-align: center;"><b>NAUTICAL KNOWLEDGE AND BRIDGE PROCEDURES</b></p> <p>Total Marks: 100</p> <p>To achieve a PASS, candidates must obtain at least 50 marks, i.e. 50%.</p> <p>Time : 2 hours.</p>	<ul style="list-style-type: none"> <li>(a) Basic principles to be observed in keeping a navigational watch;</li> <li>(b) Operational guidance for officers in charge of a navigational watch;</li> <li>(c) Basic principles to be observed in keeping a watch in port;</li> <li>(d) A general knowledge of the design and construction of a vessel's binnacles and compasses, the purpose of the correctors and an understanding of the practices of compass adjusting.</li> </ul> <p>2. (a) Knowledge of the certificates required to be carried by small vessels.</p> <p>(b) A working knowledge of the laws relating to the following with reference to small vessels:</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ul style="list-style-type: none"> <li>10. Approved in-service experience,</li> <li>11. Approved training ship experience</li> <li>12. Approved simulator training where appropriate.</li> </ul> <p>Approved laboratory equipment training</p>	

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate’s Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

<p><b>Section 1 - Protection of the Environment</b></p>	<p>A working knowledge of the laws relating to the protection of the environment including the pollution of the sea by oil and other dumping</p>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ul style="list-style-type: none"> <li>13. Approved in-service experience,</li> <li>14. Approved training ship experience</li> <li>15. Approved simulator training where appropriate.</li> </ul> <p>Approved laboratory equipment training</p>	<p>shipboard operations and ensuring compliance with MARPOL requirements are fully observed</p>
<p><b>Section 2 - Cargo Operations</b></p>	<p>An outline knowledge of:</p> <ul style="list-style-type: none"> <li>(a) Laws relating to the handling, stowage and carriage of hazardous goods.</li> <li>(b) The safe handling, stowage and carriage of common cargoes including hazardous goods;</li> <li>(c) Precautions to be taken before entering holds, tanks and void spaces.</li> </ul>	<p>Examination and assessment of evidence obtained from one or more of the following:</p> <ul style="list-style-type: none"> <li>1. Approved in-service experience,</li> <li>2. Approved training ship experience</li> <li>3. Approved simulator training where appropriate.</li> <li>4. Approved laboratory equipment training</li> </ul>	<p>Stowage and securing of cargoes ensures that stability and stress condition remain within safe limits at all times during the voyage</p>

Specifications of minimum standard of competence for: Deck Officer Class III

- (a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;
- (b) Holder of Chief Mate's Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

--	--	--	--

Particular Requirements:

- (a) (i) Holder of Deck Officer Class IV Certificate of Competency with 1-year watchkeeping experience since obtaining this Certificate;
- (ii) Holder of 2nd Mates Certificate issued under these Regulations with six months approved watchkeeping sea service since obtaining the 2nd Mate Certificate;
- (iii) Holder of an unlimited Class III Deck Officer certificate;

Specifications of minimum standard of competence for: Deck Officer Class III

(a) Command of vessels of up to 1600 Gross tons engaged in operations in "Appendix A, B & C of Schedule VI;

(b) Holder of Chief Mate's Certificate of vessel less than 5000 Gross tons operating in the Unlimited Trade Area.

(b) Minimum age 23 years.

(c) Training Qualifications:

(i) Successful pass to all parts of the examinations;

(ii) Medical certificate of physical and medical fitness including Hearing, and colour vision;

Supplementary courses as required by the Marine Board