

COXSWAIN 1 NEAR COASTAL – YOUR STUDY CHECKLIST

View the [Skills & Knowledge](#) required for National Standard for Commercial Vessels Part D from which oral examinations sample a candidate's proficiency.

International Rules for the Prevention of Collisions at Sea

Part A-General

Competent	More study
Nothing will exonerate- vessel - master - crew	Neglect of ordinary practice
Definitions – vessel – pdv – sail - fishing	NUC - CBD – RAM - underway

Part B Steering & Sailing - Section 1

Competent	More study
Application -Rule 4- Conduct of vessels in any condition of visibility	
Lookout – Rule 5- At all times Sight & hearing All available means Full appraisal	Safe speed -Rule 6- Visibility Traffic Manoeuvrability Background lighting Hazards Wind, Sea & Current Draught & Depth
Risk of Collision -Rule 7- All available means No change in Bearing Scanty information	Avoiding action -Rule 8- Positive & Timely Due regard Safe distance, slow, stop
Narrow channels -Rule 9- Starboard side 20 metres Sail & Fishing	Traffic Separate -Rule 10- Joining Crossing Anchoring

Part B Steering & Sailing - Section 11

Competent	More study
Application -Rule 11- Conduct of vessels in sight of one another	
Sailing vessels -Rule 12- Port tack gives way Windward gives way Can't determine pt give way	Overtaking -Rule 13- 22.5° abaft beam Any doubt Subsequent alteration Alter to Pt/Stb
Head on -Rule 14- Reciprocal Any doubt Alter to Stb	Crossing -Rule 15- Slow or stop Avoid crossing ahead Avoid altering to port
Give way -Rule 16- Early & substantial Avoid crossing ahead Avoid altering to port	Give way -Rule 17- Keep course & speed Action to avoid collision by her manoeuvre alone
Responsibility/vessels -Rule 18- a., b., c. NUC- RAM-Fishing -Sailing	Responsibility/vessels -Rule 18- d., e. CBD-Seaplane

Part B Steering & Sailing - Section 111

Competent	More study
Conduct of Vessels in Rest Visibility	
Section 111- Applies to Conduct of Vessels in/near Safe speed-engines ready- lookout	Res vis -Rule 19- Avoid to port fwd beam Avoid aft beam Radar alone

IRPCS- Part C- Lights & Shapes

Competent	More study
Application – Rule 20- All weather Sunset to sunrise Shapes by day	Exemptions/specifications – Annex
Definitions – Rule 21- Masthead 225° Side lights 112.5° Stern lights 135° Towing lights 135°	Visibility – Rule 22- Masthead Side lights Stern lights Towing lights <12 mtrs or >12 to 50 mtrs
Lights – Rules 23-27 Pdv Towing & pushing Sailing & oars Fishing NUC & RAM	Lights – Rules 28-31 CBD Pilot Anchored Seaplanes

IRPCS- Part D- Sound Signals

Competent	More study
Definitions – Rules 32 Short Prolonged	Equipment – Rules 33 <12mtr >100mtr
Manoeuvre– Rules 34 • •• ••• ••••• - - • - - •• - • - • -	Restricted Visibility– Rules 35 - - - - •• - •••• ••••• • - • Anchored <100Mtrs Anchored >100Mtrs Aground <100Mtrs Aground >100Mtrs
Attracting attention– Rules 36	Distress Signals– Rules 37
Examiners comments:	

IALA- Buoyage System A

Competent	More study
Lateral buoyage	Cardinals
Safe water, isolated danger	Special marks

Competent		More study	
Outcome	Content		Standards for evaluating
Table 2 Outcome Elements of Shipboard Safety Safety and Emergencies including survival craft	Safety and Emergencies		
		Apply basic survival skills	<ul style="list-style-type: none"> • Practice survival techniques • Operate lifesaving and survival equipment • Undertake and understand risk management processes including SMS operational practices • Follow safety procedures and take action • Understand and follow fire minimisation procedures • Respond to and fight fires with portable and other fire fighting appliances including correct use of vessel closure and shutdown systems • Identify and respond to risks associated with confined spaces • Practice survival techniques using survival craft
		Survive at sea using survival craft	
		Fire minimization	
		Fire fighting	
		Risk management & SMS	
	Meet WHS requirements (confined spaces)		
Competent		More study	
Table 6 Outcome 6.3 Comply with regulations to ensure safe operation of a vessel up to 12 metres	Regulations & Port Operations		
		IALA Buoyage System 'A'	<ul style="list-style-type: none"> • Identify and implement local, State, Commonwealth and Territory regulations • Apply the duties and responsibility of Master as per national/international requirements • Undertake watchkeeping duties in compliance with national and international requirements • Apply the Col • Understand and apply SMS and emergency operating procedures • Understand and comply with the requirements for crew inductions
		Master's responsibility SMS crew induction	
		Col regs - Rules Day shapes, Lights, Sound signals, Distress signals	
	Commonwealth, State local regulations		
Table 3 Outcome Environment Follow environmental work practices	Environmental Responsibilities		
		Environmental workplace practices	<ul style="list-style-type: none"> • Identify safe and environmentally acceptable practices for: • Refuelling • Cleaning up fuel or oil spills • Understanding garbage, sewage, noise, anchoring or marine life and other environmental type maritime responsibilities • Antipollution procedures and equipment
		Maintain environmental records	
	Precautions to prevent pollution & Oil spill		
Competent		More study	
Table 6 Outcome 6.2 Apply seamanship skills aboard a vessel up to 12 metres	Practical Seamanship		
		Knowledge of structure & seaworthiness	<ul style="list-style-type: none"> • Demonstrate knowledge of var. types of hull • Identify deteriorated hull/fittings & reason • Identify rope types and common uses • Tie common knots such as reef knot, bowline, sheet bend, clove hitch, round turn and 2 half hitches and understand their use • Eye splice a fibre/synthetic rope end join two ends complying with manufacturer's recs • Whip an end • Rig a vessel for towing and the towed vessel according to established procedures for varying weather conditions • Prepare and anchor a vessel in varying weather conditions, Weigh anchor • Rig a sea anchor to control rate and direction of drift and/or angle to sea • Use a sea anchor to prevent broaching • Understand loading/discharging/move weight/s • Take appropriate action in relation to nav. emergencies within sheltered waters
		Use and maintain ropes	
		Secure at berth	
		Secure at anchors	
		Towing	
		Basic stability	
		Drogues	
	Respond to nav emergency		

Competent		More study	
Outcome 6.1 Handle a vessel up to 12 metres	Vessel Handling and Manoeuvring		<ul style="list-style-type: none"> • Demonstrate knowledge of the features of a vessel, which relate to handling characteristics & compliance with current maritime publications or accepted procedures • Demonstrate techniques to manoeuvre the vessel through: <ul style="list-style-type: none"> -- Berthing and leaving a berth -- Berthing and unberthing in a pen -- Person overboard -- Coming to and leaving a mooring -- Steering astern through a "s" configuration -- Turn short around in a limited space -- Towing and being towed -- Beaching and refloating safely -- Turn a vessel across the tide across the wind • Demonstrate knowledge of the techniques for crossing a coastal bar with and against the sea
		Vessel characteristics - i/d, o/d, jets displacement, trim, prop & rudder action,	
		Berthing alongside & berthing in a pen	
		Steering astern S manoeuvre	
		Short turn around	
		Wind & tide	
		Towing and emergencies	
		Bar knowledge	
Competent		More study	
Table 5 Outcome 5.1 a Perform basic scheduled and running maintenance on outboard and inboard engines and ancillary deck equipment	Basic engineering (Propulsion limits -Outboard unlimited, Inboard <100 kW)		<ul style="list-style-type: none"> • Appropriate selection and use of machinery and equipment • Maintenance is undertaken in accordance with the technical specifications, maintenance schedules, vessel operating procedures and regulatory requirements, under the supervision of appropriately qualified personnel • Apply safety precautions and pollution control measures during refuelling as per legislative requirements and vessel operating procedures • Maintenance is undertaken according to safe and environmentally acceptable practices as per vessel or manufacturers procedures • Identify, report and record faults
		Steering gear	
		Ancillary deck equipment	
		Cooling, lubrication and fuel systems	
		Bilge pumping arrangements	
		Monitoring machinery	
		Report/record machinery malfunction	
		Low voltage (12V to 24V) electrical sys.	
	Conduct refuelling operations		
	Comply with emergency shutdown procs		
Competent		More study	
Table 5 Outcome 5.2 a Operate inboard and outboard engines	Operate inboards/outboards (Propulsion limits -Outboard unlimited, Inboard <100 kW)		<ul style="list-style-type: none"> • Operate inboard and outboard engines according to vessel or manufacturers' procedures • Ensure fuel, electrical, steering, propulsion and cooling systems operate effectively and faults can be identified and reported • Trouble shoot faults with navigation lights • Trouble shoot faults with trailer lights • Risks associated with portable fuel tanks • Risks associated with road transport of fuel and oil (trailer boats)
		Operate propulsion units and auxiliary Systems	
		Perform Pre-Start, Running and Shut-Down checks	
		Inspect the fuel systems appropriate to basic inboard and outboard engines	
		Safely inspect low voltage electrical systems appropriate to basic inboard and outboard engines	
	Identify, record and report inboard and outboard operating difficulties		

Competent		More study																	
<p>Outcome 5.1 b Operate main propulsion unit and auxiliary systems</p>	<p align="center">Coxswain Engineering (Inboard propulsion systems <500 kW)</p> <table border="1"> <tr><td>Operate propulsion units and auxiliary systems</td></tr> <tr><td>Basic operating principles of two – and four – stroke engines</td></tr> <tr><td>Perform Pre-start/ Shut down checks- petrol, diesel engines</td></tr> <tr><td>Drive train assembly</td></tr> <tr><td>Steering gear</td></tr> <tr><td>Ancillary equipment</td></tr> <tr><td>Cooling, lubricating and fuel systems</td></tr> <tr><td>Bilge and fire pumping arrangements</td></tr> <tr><td>Monitoring machinery</td></tr> <tr><td>Machinery malfunction</td></tr> <tr><td>Electrical systems (12 V – 240 V)</td></tr> <tr><td>Liquid Petroleum Gas (LPG)</td></tr> <tr><td>Basic refrigeration</td></tr> <tr><td>Conduct refuelling operations</td></tr> <tr><td>Shore power connection – an awareness of hazards</td></tr> <tr><td>Comply with emergency shut-down procedures</td></tr> </table>		Operate propulsion units and auxiliary systems	Basic operating principles of two – and four – stroke engines	Perform Pre-start/ Shut down checks- petrol, diesel engines	Drive train assembly	Steering gear	Ancillary equipment	Cooling, lubricating and fuel systems	Bilge and fire pumping arrangements	Monitoring machinery	Machinery malfunction	Electrical systems (12 V – 240 V)	Liquid Petroleum Gas (LPG)	Basic refrigeration	Conduct refuelling operations	Shore power connection – an awareness of hazards	Comply with emergency shut-down procedures	<ul style="list-style-type: none"> Operate equipment, machinery, pumping & aux equipment adhering to principles and practices as described in manufacturers' specs, manuals and vessel operating procedures to ensure vessel is kept in a safe condition Maintain equipment & pumps according to vessel and/or manufacturers' maintenance requirements Apply safety precautions and pollution prevention measures during refuelling according to legislative requirements, suppliers' requirements and vessel operating procedures Operate machinery according to vessel or manufacturers' procedures Identify and report/rectify faults with main prop/aux systems
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Competent	More study		
Table 7 Outcome 7.1 Respond to emergency situations	Emergency and Safety Procedures		<ul style="list-style-type: none"> • Respond to emergencies in accordance with vessel procedures and acceptable maritime practices • Use current maritime publications relative to a 12m vessel
Outcome 7.2 Collect and assess weather forecasts	Meteorology		<ul style="list-style-type: none"> • Obtain weather information applicable to an intended voyage • Apply weather info during voyage planning and explain expected weather patterns • Utilise information for passage plan and Nav • Relate information in forecast
Outcome 7.3 Collect and assess weather forecasts	Navigation and Local Knowledge		Navigate the vessel through a pre-planned route considering: <ul style="list-style-type: none"> • Fuel consumption • Courses to steer between turning points • Compliance with marks and avoidance of hazards • Plot the position derived from GPS • Understand dangers of GPS reliance coastal areas • Plot visual bearings on a chart to derive a position • Steer a pre-planned course • Apply the Col Regs • Relationship between degrees and minutes of latitude, with nautical miles are established • Identify the times and heights of high and low water tide tables • Explain the impact of tidal range on chart depths • Use of electronic aids could include but not limited to: GPS, chart plotters, AIS, RADAR, depth sounders, communication systems
		Knowledge of small vessel stability & stability terms	
		Disabled vessel	
		Collision, grounding	
		Person overboard	
		Heavy weather	
		Beaching	
		Cyclone activity in the area	
		Basic meteorological terms	
		Sources of weather reports and warnings	
		Local weather	
		Cyclonic/storm tracking, recording, alerts and warnings	
		Chart information (symbols and abbreviations)	
		Coastal features	
		Dangers to navigation	
		Compass	
		Basic pilotage techniques	
		Speed, distance and time calculations	
		Use of tide tables	
		Electronic aids and their limitations	