Section	Question	Answers
1	A	i)Bow, ii) Starboard, iii) Stern, iv) Port
	B	i)The green areas cover and uncover depending on the height of the tide ii)The blue and white areas are always covered with water. The colour indicates its depth iii)The yellow areas are land
	C	i), ii), iii), iv)
2	A	i)Red and can shaped ii)Green and cone shaped
	B	i)Pass it to the North
	C	iii)Pass it to the South
	D	iii)At the start of a channel
3	A	i)A, ii) H, iii) B, iv) F, v) C, vi) G, vii) D, viii) K
	B	i)Wreck, considered dangerous to navigation ii)Rock awash at the level of chart datum iii)Major light or structure
	C	i)281˚(T) 2.1 miles ii)086˚(T) 2.8 miles
	D	Latitude scale
	E	348˚ (T) = 355˚(M)
	F	i)Direction of buoyage ii)Yes, The third bearing gives an indication of accuracy. It also produces a small cocked hat over the chart symbol as though the vessel is moving.
	G	i), iii), iv)
	H	Log reading and time
4	A	i)Buoyancy aid ii) Buoyancy aid iii) Lifejacket iv)Lifejacket
	B	All
	C	i), ii), iii), iv)
	D	i), ii), iii), iv)
	E	ii), iii), iv), v), vi)
5	A	Use the formula 4 x maximum depth for chain 6 x maximum depth when warp is used i)20 metres of chain ii)30 metres iii)Nylon is strong and will stretch to absorb some of the shock loading. It also sinks.
	B	i), ii), iii)
	C	i), ii), iii)
6	A	i)1840 UT 3.3m Neaps ii)1249 DST 4.3m Springs
	B	HW Port Fraser 1750 UT HW 3.3m LW 1.0m Height of tide at 1450 UT (HW-3) = 2.2m
	C	3.0, i)3.2m
	D	i)0.5 knots, approximately north

		ii)2.1 knots, approximately south
	E	HW +2 Neaps 0.7 knots, approximately southeast
	F	2.2 miles i) 12.2 knots
	G	Any two from: Flow of water past fixed objects On a calm day, how moored boats are lying Seaweed streaming in the tide from a dock etc. Small objects flowing with the tide
7	A	i)Course over the ground ii)Speed over the ground iii)Waypoint iv)Cross track error
	B	i), ii)
	C	i)See separate trace .pdf ii) See separate trace .pdf iii)Approximately 0.75 miles
8	A	Any one from: Use a hand bearing compass to see if the bearing remains constant Or By lining the approaching vessel up with a part of the boat to see if the apparent bearing remains constant
	B	No. There are give way vessels and stand on vessels. In all cases a collision must be avoided.
	C	Yes
	D	i)At anchor ii)Motorsailing iii)Diving
	E	a)Both vessels – A and B are in a head-on situation, Both must alter course to starboard and pass port to port. b)Vessel B – B is under power and must give way. She must keep well clear c)Vessel A – A had B on her starboard side and must give way. She should alter course to go astern of B. She could slow down or stop. d)Vessel A – A is on a port tack and must give way. She should bear away and go astern of B. She could go about. e)Vessel A – Both yachts are on the same tack. A is the windward vessel and must give way. She should gybe and go astern of B. f)Vessel A – A is overtaking and must give way. She should keep well clear. This rule takes priority over other rules.
9	A	i), ii), iii), v)
	B	a)i), b)i)
	C	Farlow Bay offers shelter, Misery Point would be rougher i)It would be rougher sea ii)It would be smoother
10	A	i)Strong northeast winds ii)Channel 80, between 0900 and 1600
	B	All. Also other points depending on the type of harbour.
	C	Steer to the left (port) to bring the transits back into line.

11	A	a)…. i)Chart 4 ii)Chart 3 iii)Chart 4 b) See separate trace .pdf c)7.5 miles, i) ½ hour d)007˚(M) e)….i) To the east, ii)Increase
	B	Yes