

Time (2.5 Hours)

Max Marks: 75

Note: ALL QUESTIONS ARE COMPULSORY. (Question 1 to 5 will carry 15 Marks each)

Q- 1 A) Find the height of the tide and depth of water at 1430 hrs, standard time, on 2nd March, off Singapore, where charted depth is 4 meters. The extract from A.T. T. is as follows-

Time Zone:- 0800	
Time	Height (M)
0014	2.7
0603	0.8
1209	2.9
1830	0.6

OR

B) Find the earliest time on 17th June, a vessel off Boston, drawing 3.4 metres will be able to cross a bar marked 2 metres, with a clearance of 1 metre under her keel. The extract from A. T. T. is given bellow:

Extract from A. T. T.		
16 Friday	0229	3.1 m
	0848	-0.1 m
	1508	2.9 m
	2109	0.2 m
17 Saturday	0325	3.0 m
	0939	0.0 m
	1601	2.8 m
	2205	0.3 m

Q-2 A) Write a short note on sailing directions.

OR

B) What are all contents of the Admiralty List of lights & Fog Signals?

Q- 3 A) Explain the conduct of vessels in narrow channels.

OR

B) What precautions you will take while using floating navigational aids?

Turn Over

Q-4 A) What are all types of marks as per IALA Buoys System?, explain and sketch safe water mark.

OR

B) Explain vessel restricted in her ability to Manoeuvre and signals shown by vessel of 100 metres length, during day and night.

Q-5 A) Find the height of light house, at 2400 hrs GMT at Darwin (Australia) on 21st November, whose charted height is 41 metres. Extracts from A. T. T. are as follows-

Time Zone:- 0930	
Time	Height (M)
0107	2.4
0634	6.5
1312	0.5
1947	7.6

OR

B) Explain conduct of vessel in restricted visibility?