



香 港 政 府 海 事 處

*Marine Department*

*Hong Kong Government*

*Local Vessel Coxswain Grade 2 Certificate of Competency*

*Part A: (Chartwork)*

Time Allowed: 1 hour 50 minutes

Answer ALL (5) questions

*Use Chart No.HK1501, Deviation Card No.3,  
Variation 2.5° E and  
Tide Table 2015*

*The position given after names of prominent points are to be used for identification  
purpose only.*

**CANDIDATES ARE NOT ALLOWED TO WRITE OR DISFIGURE THIS PAPER**

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*This Paper consists of this page and another three printed page*

**Important notes to Candidates:-**

- Write down your name on top of the answer sheet.
- Write the question number on the top left hand corner of each page.
- Answer each question on a new page.
- No need to copy down the question onto the answer sheet.
- Switch off mobile phone and all communication devices at the Examination hall.
- Return all question paper after examination.
- Return all used and unused answer sheet after examination.
- The whole progress of examination is recorded by close circuit televisions (CCTV) and voice recorders are also fitted in the examination hall.
- You are not allowed to take recording or photo of any question or answer paper.
- Do not disturb or help other candidate(s) to answer question.

If you contravene the above rules, you may be disqualified or given no marks on paper.

1. At 0800, a vessel was at a position where Green Island Light (Lat.  $22^{\circ} 17.0' N$  Long.  $114^{\circ} 06.7' E$ ) bore due East, distance 0.7 mile off. The vessel was required to reach a position Lat.  $22^{\circ} 12.0' N$  Long.  $114^{\circ} 05.5' E$  by 0850 and the current was setting  $205^{\circ} (T)$  at a rate of 0.8 knot.

To find: (a) the true course to steer;  
(b) the speed of the vessel.

(20 marks)

2. At 1000, an oil tanker departed from her anchored position where Datum Rock Light (Lat.  $22^{\circ} 16.3' N$  Long.  $114^{\circ} 03.8' E$ ) bore  $200^{\circ} (T)$  and Kau Yi Chau Radar Tower (Lat.  $22^{\circ} 17' N$  Long.  $114^{\circ} 04.6' E$ ) bore  $070^{\circ} (T)$ . Vessel steered on course  $185^{\circ} (T)$  at a speed of 4 knots. At 1100, Sham Shui Pai Light (Lat.  $22^{\circ} 12.3' N$  Long.  $114^{\circ} 02.8' E$ ) was observed by radar  $45^{\circ}$  on starboard bow, distance 0.7 mile off.

To find: (a) Course Made Good;  
(b) Speed Made Good; and  
(c) Set and Drift.

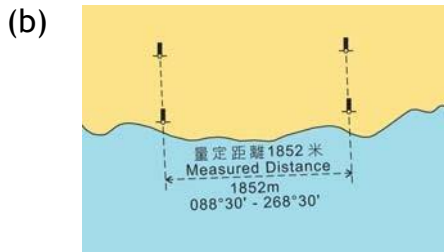
(20 marks)

3. A vessel was steering on a compass course  $318^{\circ}$  at a speed of 4 knots. At 1200 observed Round Island Light (Lat.  $22^{\circ} 12.84' N$  Long.  $114^{\circ} 11.1' E$ )  $337^{\circ}$  by compass and Wong Chuk Kok Light (Lat.  $22^{\circ} 12.5' N$  Long.  $114^{\circ} 09.6' E$ )  $301^{\circ}$  by compass. At 1300 vessel stopped for engine repair, Master ordered to report the incident to "MARDEP" and to display Signals for vessel Not Under Command. At 1430 vessel resumed her voyage and altered course towards a position 0.3 mile due West of Green Island Light (Lat.  $22^{\circ} 17.0' N$  Long.  $114^{\circ} 06.7' E$ ). If the direction of current was estimated to be setting  $310^{\circ} (T)$  at a rate of 0.5 knot.

To find: (a) the vessel's position in Latitude and Longitude at 1430;  
(b) the true course to steer from 1430 position to the destination;  
and  
(c) the time of arrival at the destination.

(20 marks)

4. Explain the meaning of the following Chart Symbols/Abbreviations:



(All questions carry equal marks) (20 marks)

5. (a) Find out the time and height of high and low tides of Tai O on 26th June 2015 .

(b) What is charted elevation?

(c) What is charted depth?

(d) Given: draft of the vessel : 1.5 m

charted depth : 6.9 m and

echo sounder reading under keel : 7.4 m;

To find : height of tide.

(e) Explain briefly about the purpose of Notice to Mariners.

(All questions carry equal marks) (20 marks)

- END -

## Reference material

DEVIATION CARD 自差表	No. 3
Ship's Head by Compass (degree) 船艏羅經方向(度)	Deviation (degree) 自差(度)
000	5W 西
020	NIL 無
040	6E 東
060	11E 東
080	14E 東
100	15E 東
120	14E 東
140	13E 東
160	11E 東
180	8E 東
200	5½E 東
220	2E 東
240	2½W 西
260	6W 西
280	9W 西
300	10½W 西
320	10½W 西
340	8W 西
360	5W 西

