



## **SEAGOING DECK OFFICER CLASS 1 & CLASS 2**

### **CERTIFICATE OF COMPETENCY**

#### **PAPER 2**

#### **PASSAGE PLANNING**

Time Allowed: 3 hours

#### ***INSTRUCTION :-***

This paper contains ONE question where

The full mark for this paper is 100 and the passing mark is 60 (60%)

Materials to be supplied:

1. British Admiralty (BA) Charts No.: 2153, 3946, 3947, 1358
2. Admiralty Tide Tables: Volume 3
3. Extracts from the following publications :
  - Admiralty List of Radio Signals Vol 6, Part 4
  - Catalogue of BA Charts and Publications
  - Malacca Strait Pilot 44

***CANDIDATES ARE NOT ALLOWED TO WRITE ON OR DEFACE THIS PAPER***

***This paper consists of this page and THREE other printed pages.***

**Notes to Candidates:-**

- i) Write down your name in the top right-hand corner on the first page of the answer sheets.
- ii) Write down the question number in the top left-hand corner on each page.
- iii) Answer each question on a new page.
- iv) No need to copy the questions' details onto the answer sheets.
- v) **Switch off all your mobile phones and communication devices when in the examination room.**
- vi) **Return all the question paper(s), the used and unused answer sheets before leaving the examination room.**
- vii) **Do not disturb other candidate(s) in the examination room.**
- viii) **Do not attempt to take any photos or recordings of any question papers and/or answer sheets.**
- ix) The progress of the examination is being recorded by close-circuit television (CCTV) and voice recorders in the examination room.

**If the above rules from item v) to viii) are infringed, candidates will be regarded as having failed the examination as a whole and will not be accepted for re-examination for such period as may be decided by the Director.**

**考生注意事項：-**

- i) 在答題紙首頁右上角寫上姓名。
- ii) 在每頁答題紙的左上角標明回答的問題題號。
- iii) 每一條問題另開新頁作答。
- iv) 不需要抄寫問題到答題紙上。
- v) **進入試場後，把手機及所有通信設備關閉。**
- vi) **離開試場前，交回所有試卷、所有用過和未用過的答題紙及草稿紙。**
- vii) **試場內不可干擾其他考生。**
- viii) **切勿嘗試拍攝或錄取任何試卷或答案。**
- ix) 考試期間試場內會有閉路電視(CCTV)和錄音系統進行記錄。

**如果違反上述 v) 至 viii) 規則，即當作所有考試不及格，以及在處長決定的期間內不得重考。**

Your vessel is a containership of 55,000 Tonnes displacement with drafts 13.0 m forward and 12.2 m aft. The ship's length between perpendiculars is 180 m and her breadth is 32 m.

She is equipped with the following navigational equipment:

- 2 radars,
- 1 gyro compass,
- 1 auto pilot
- 2 GPS (Global Positioning System) receivers,
- 1 echo sounder,
- 1 AIS (Automatic Identification System)

The ship's service speed and manoeuvring characteristics are as follows:

Vessel Speed at draught 14m	10° Rudder at draught 10m	Advance (Cables)	Transfer (Cables)
Full Ahead = 18.5 knots	Full Ahead	7	2.0
Half Ahead = 12 knots	Half Ahead	5	1.5
Slow Ahead = 9 knots	Slow Ahead	3	1.0
Dead Slow Ahead = 4.5 knots	Dead Slow Ahead	2	0.5

Her position was in Lat. 01° 15'.0 N Long. 103° 34'.0 E, inside the Singapore West general purpose anchorage waiting for order to berth the vessel alongside at Quay "LBT4" of Port Kelang, Malaysia.

Remarks:

When conducting the passage planning for (b) and (d) on the separate sheets, indicate the waypoints, the position fixing methods you would propose for all sections of the passage, and indicate ALL required actions, points to remind, any contingency plan and master's instruction with proper planning for the passages.

You are required to

- (a) With reference to IMO (International Maritime Organization) Resolution A.893(21) Guidelines for Voyage Planning and the

ship's particulars above, make a general appraisal for the passage in (b) and (d) and prepare a brief summary with notes stating your consideration in the passage planning for the attention of the officers in charge of navigational watch.

**(25 marks)**

- (b) Using all the available information, plan the passage from the anchorage to the pilot boarding station of Port Kelang for ETA (estimated time of arrival) pilot station earliest time on 7<sup>th</sup> December to meet the condition that the height of tide at berth Port Kelang will not be more than 1.5 m so that the quay crane can be deployed above the top of the containers for discharging.

**(40 marks)**

- (c) Compose a telex or an email to the local agent for the ETA pilot station, estimated time of berthing (ETB), and other necessary information and supplies, if any.

**(15 marks)**

- (d) During the monitoring of the voyage plan, explain what expected Rate Of Turn (ROT) will be at full/half speed when the ship turning round inside the fairway channel of Port Kelang. Also, how to ensure the ship's position is on the planned path while turning.

**(20 marks)**

**-END-**