

Candidate's Name:

Ports and Maritime Organization
Seafarers' Examination and Certification Directorate

Exams Code : CMME

Subject: Meteorology

Rank : Chief Mate (GT \geq 3,000)

Date:

Time allowed: 2,5 Hrs

(Pass mark : 50)

- Q.1) - a) - Explain the signs which give warning of the approach for the TRS.** (10 Marks)
- b) - Explain the correct evasive actions when navigating within 10 NM from center of TRS in the Southern Hemisphere(SH).** (10 Marks)
- Q.2) - a) - Differentiate between **sea wave** and **swell**.** (10 Marks)
- b) - Explain how **swells** may decay?** (10 Marks)
- Q.3) - a) - Explain the information should be reported by the vessel to international ice patrol once observing the **ice** in vicinity of north Atlantic and vice versa.** (10 Marks)
- b) - Describe briefly following **ice** terms:**
- i) – Ice shelf ii) – Growler** (10 Marks)
- Q.4) - Explain the formation of a **frontal secondary depression** and draw a diagram showing isobars and wind circulation.** (10 Marks)
- Q.5) - a) - On the chartlet provided, show and name the **currents** of the North Pacific Ocean and indicate whether each is cold or warm current.** (12 Marks)
- b) - What is the main cause of persistent **fog** off the Northeastern Japan, mentioning the time of maximum occurrence.** (10 Marks)