



NATIONAL SENIOR CERTIFICATE EXAMINATION  
NOVEMBER 2014

**MARITIME ECONOMICS**

**MARKING GUIDELINES**

Time: 3 hours

300 marks

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**These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.**

**The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.**

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**QUESTION 1 THE MARITIME WORLD**

- 1.1 1.1.1 Ships are now using oil/ships have longer range/no need to call at as many bunkering ports/Port X omitted as port of call by some ships (6)
- 1.1.2 No revenue from sales of coal/ships always would have needed other stores/that income now lost to Port X/job losses (6)
- 1.2 1.2.1 Wind/solar energy/any other innovative form of propulsion (4)
- 1.2.2 Cleaner fuels = less air pollution/cheaper/more efficient fuel and fuel systems (4)
- 1.2.3 Using cleaner fuels = less sulphur or carbon emissions/  
Improved hull design = ship moves more easily through the water  
= less fuel consumption  
Slow steaming = fuel saving and therefore less emission (4)
- 1.3 1.3.1 Bulkier that cannot pass through Suez full laden/must sail via the Cape/  
allow description of size (2)
- 1.3.2 Brazil to China (by \$1,89) (6)
- 1.3.3 More demand for ore/fewer ships available/any other plausible reason (4)
- 1.3.4 Firming (2)
- 1.3.5 Greater distance for ships to steam/greater fuel and time costs/greater demand for product = greater demand for ships (4)
- 1.3.6  $178\,000 \times \$24,55 = \$4\,369\,900$  (4)
- 1.4 1.4.1 Shuttle tanker (2)
- 1.4.2 Suezmax Tanker (2)
- 1.4.3 LNG Carrier (2)
- 1.4.4 Products Tanker (2)
- 1.5 1.5.1 Philippines (2)
- 1.5.2 Islands = familiar with the sea and vessels/fishing/little employment on islands/any other plausible reason (4)

**[60]**

**QUESTION 2      SHIPPING OPERATIONS**

- 2.1    2.1.1   Lloyd's Open Form (2)
- 2.1.2   SCOPIC (2)
- 2.1.3   No – no salvage operation occurred  
              Or Yes – if reference is made to SCOPIC (4)
- 2.1.4   (a)    16 days × 42 t/d = 672 ton (6)
- (b)    2 800 t – 672 t = 2 128 tons (6)
- (c)    Kills or affects wildlife/negative impact on fishing industry/negative  
                  impact on leisure industries/costs a lot to clean up (6)
- (d)    She grounded shortly before spring high tide (4)
- 2.1.5   NO (2)
- 2.1.6   (a)    Hull & Machinery (2)
- (b)    Cargo Insurance (or P&I) (2)
- (c)    P&I (2)
- 2.2    2.2.1   Premium (2)
- 2.2.2   Arbitration (2)
- 2.3    2.3.1   One (2)
- 2.3.2   Two (2)
- 2.4    Customs (or SARS) (2)
- 2.5    2.5.1   Any two examples of dangerous cargoes that can be containerised (4)
- 2.5.2   (a)    It has a diamond-shaped sign with codes on it (or any reference to  
                  special labels) (2)
- (b)    On deck/near the bow (or away from the accommodation) (4)
- 2.6    2.6.1   (a)    Chandler (2)
- (b)    I confirm that I have received the voyage instructions Vancouver to  
                  Manila (2)
- (c)    Request free pratique (2)
- 2.6.2   Voyage Charter (2)
- 2.6.3   Charter Party (2)

- 2.6.4 Train (or Rail) (2)
- 2.6.5 (a) To check that the holds are clean and dry/ship is ready to load (4)
- (b) In anchorage 00:01 6/12 but alongside only 14:00 8/21/does not want to waste time when alongside/time waste would incur extra costs (4)
- 2.6.6 (a) 22 000 tons (6)
- (b)  $\frac{22\ 000}{1\ 000\ \text{t/h}} = 22\ \text{hours}$  (6)
- (c) 14:00 on 8/12 + 2 + 22 + 3 = 14:00 on 8/12 + 27 hrs = 17:00 on 9/12 (6)
- 2.6.7 (a) No – bunkering takes 8 hours; loading takes 22 hours (6)
- (b) HFO = 880 t × US\$540 = US\$432 000  
MDO = 180 t × US\$710 = US\$127 800 TOTAL = US\$559 800 (6)
- (c) US\$559 800 × CAN\$1,22 = CAN\$682 956 (6)
- 2.6.8 Pilotage to anchorage/pilotage and tugs to berth/surveyors fees/bunkers/stores/paint/port dues/immigration/agents fees/other plausible costs (6)
- [120]**

### QUESTION 3 INTERNATIONAL TRADE

- 3.1 3.1.1 ISPS Code (2)
- 3.1.2 Night (2)
- 3.1.3 Twice (2)
- 3.1.4 Saldanha Bay (2)
- 3.1.5 Philippines (2)
- 3.1.6 Pacific Ocean (2)
- 3.1.7 (a) Malta (2)
- (b) Tax/politics/trade/crewing with any nationals/getting a bank loan, any other plausible reason (4)
- (c) Cheaper/not enough British crew/tax reasons (4)
- (d) Malta (2)
- (e) Give marks for a reasoned argument for or against (or both) for flags of convenience (10)
- (f) Give marks for a reasoned discussion of international maritime law (10)
- 3.2 3.2.1 Weekly (2)

3.2.2	(a)	AS Heron	(2)
	(b)	26 May	(2)
	(c)	17 June	(2)
3.2.3		Three	(2)
3.2.4		Netherlands (or Holland)	(2)
3.2.5	(a)	Shipper	(2)
	(b)	Shipper	(2)
3.2.6		Carrier	(2)
3.3	3.3.1	Grain/coal/iron ore/containers (any one)	(2)
	3.3.2	North Sea or Russia	(2)
	3.3.3	English Channel	(2)
	3.3.4	(a) $\frac{400}{24} = 16,7 = 17$ ships	(4)
		(b) $400 \times 365 = 146\ 000$ ships	(4)
3.4	3.4.1	Reduce the involvement of investors/increase the possibility of the project starting/underwrite the project, thereby ensuring its success	(6)
	3.4.2	Job creation/bring revenue to the region/provide service for passing ships/provide service for ships calling at the port/provide facility for force majeure incidents	(6)
	3.4.3	Oil industry or fishing industry	(2)
			<b>[90]</b>

#### QUESTION 4 ENVIRONMENTAL CONSIDERATIONS

4.1	4.1.1	Typhoon (or tropical cyclone or hurricane)	(2)
	4.1.2	Area of calm at the centre of the typhoon	(4)
	4.1.3	Strong wind/heavy seas/probable serious damage to ship	(6)
	4.1.4	Ensure all hatches are properly battened down/all gear secured	(4)
	4.1.5	Damage equipment/damage breakwaters/ships will break loose/no cargo-work possible/flooding of access roads and railways/any other plausible result	(6)
4.2		Ballast water contains organisms/when ballast water is discharged, organisms released into environment/no natural predators = reproduce rapidly to the detriment of local species/thus need for ballast water exchange en route to port in another region to avoid foreign species invading local ports	(8)
			<b>[30]</b>

**Total: 300 marks**