



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2012

MARITIME ECONOMICS

MARKING GUIDELINES

Time: 3 hours

300 marks

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.

QUESTION 1 THE MARITIME WORLD

- 1.1 1.1.1 Carbon Monoxide/Carbon Dioxide/any form of sulphur-related gas
Any one (2)
- 1.1.2 (a) Ships need to be fitted with emission 'scrubbers'
Gas oil costs more
Therefore operating costs are higher (2 × 2 = 4)
- (b) Diesel burns more cleanly (2)
- 1.1.3 (a) $72 \times 45 = 3240$ tons (6)
- (b) $3240 \times .40 = 1296$ tons + $3240 = 4536$ tons (6)
- (c) For emergencies (e.g. being stuck in ice/Unforeseen delays/Any other) (4)
- (d) More weight = more fuel consumed (4)
- 1.2 1.2.1 Bravo (2)
- 1.2.2 Can fit in terms of length/Can fit in terms of beam /Drydock is free shortly after vessel finished cargowork (2 × 2 = 4)
- 1.2.3 19 OR 20 November (2)
- 1.2.4 Accept from 24 to 26 November (2)
- 1.3 1.3.1 (a) Panamax Bulker (2)
- (b) Accept any value between \$13 000 and \$19 000 (6)
- (c) Accept any value between \$65 000 and \$95 000 (6)
- 1.3.2 DESCRIPTION OF TRENDS OF CAPE-SIZE SHIPS (8)
- [60]**

QUESTION 2 SHIPPING OPERATIONS

- 2.1 2.1.1 (a) Ship hitting a buoy/ship hitting a pier/any other fixed or floating object (2)
- (b) Tax benefits/unrestricted crewing/trade regulations (cabotage)/cheaper registration/fewer formalities/political reason/any other (5 × 2 = 10)
- (c) Yes (2)
- (d) Owned in Japan/Flagged in Marshall Islands (4)
- 2.1.2 (a) $\frac{960}{(20 \times 2)} = 24$ hours + 8 = 32 hours (6)
- (b) $32 + 1 = 33$ hours (4)
- (c) 08:00 on 17/10 + 33 hours + 4 = 21:00 on 18/10 (6)
- (d) NO (2)
- (e) Dispatch (2)
- (f) Shipowner (2)
- (g) 21:00 on 18/10 + 4 hours = 01:00 on 19/10 (4)
- (h) No (2)
- (i) Cars will be damaged (2)
- 2.1.3 (a) Benz Shipping (2)
- (b) Benz Vehicle Assembly (2)
- 2.1.4 (a) Shipper (2)
- (b) Consignee (2)
- (c) Consignee (2)
- 2.1.5 Ro-Ro (2)
- 2.2 2.2.1 (a) Northern P&I Club (or P&I) (2)
- (b) Asian Maritime (or H&M) (2)
- (c) ABS (or Classification Society) and Marshall Islands (or Flag State) (2 × 2 = 4)

2.2.2	Master	(2)
2.2.3	(a) Owner (or charterer in this case – bareboat charter)	(2)
	(b) $\$52\,800\,000 + 42\,000\,000 + 1\,520\,000 = \$96\,320\,000$	
	$\frac{43\,520\,000}{96\,320\,000} \times \frac{660\,000}{1} = \$298\,205.98$	(8)
	(c) $\$520\,000 \times \text{AUS\$ } 1.58 = \text{AUS\$}821\,600$	(6)
2.2.4	(a) Up forward	(2)
	(b) REPORT – Awards marks at own discretion, but main facts to be given	(14)
2.2.5	High windage/wind likely to exert force on ship/strong wind blowing	(6)
2.3	2.3.1 Car parts very valuable/containerised to reduce theft/reduce damage Quicker to handle/cheaper Any 4	(4 × 2 = 8)
	2.3.2 Feeder service	(2)
	2.3.3 Bill of Lading	(2)
		[120]

QUESTION 3 INTERNATIONAL TRADE

3.1	3.1.1 Coal & LNG	(2 × 2 = 4)
	3.1.2 Questionable safety of nuclear energy/under pressure to stop Iranian oil imports	(4)
	3.1.3 (a) More cargo/more demand for ships/higher freight & charter rates	(6)
	(b) Bulk Carriers & Gas Carriers	(4)
	3.1.4 (a) $\$30\,000 \times 65 \text{ days} = \$1\,950\,000$	(6)
	(b) $\text{HFO } 55 \times 57 \times 650 = 2\,037\,750$ $\text{MDO } 3 \times 65 \times 950 = 185\,250 = \$2\,223\,000$	(6)
	(c) $(5\,000 \times 3) + (8\,000 \times 5) = \$55\,000$	(6)
	(d) Total costs = \$4 448 000	(6)
	(e) $\frac{4\,448\,000}{160\,000} = \27.80 per ton	(6)
3.2	3.2.1 Arabian Gulf (or Persian Gulf)	(2)
	3.2.2 Increase	(2)
	3.2.3 Possible shortage of oil/High demand for oil/High prices	(6)
	3.2.4 Containers/grain/steel/coal/oil products	(3 × 2 = 6)
	3.2.5 West Africa/Alaska/North Sea/North Africa/Venezuela/US Gulf/Brazil Any 2	(2 × 2 = 4)
3.3	3.3.1 MARPOL	(2)
	3.3.2 SOLAS	(2)
	3.3.3 STCW 95	(2)
	3.3.4 ISPS	(2)
	3.3.5 SOLAS	(2)
3.4	3.4.1 Possible heavy weather in Cape Horn area or difficult passage via Magellan	(2 × 2 = 4)
	3.4.2 Fertiliser (or farming)	(2)
3.5	3.5.1 Free Alongside Ship	(2)
	3.5.2 Full Container Load	(2)
	3.5.3 Twenty foot Equivalent Unit	(2)
		[90]

QUESTION 4 MARINE ENVIRONMENTAL CHALLENGES

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|-----|---|-------------|
| 4.1 | OPINION RE EXPENSE ON NEW POLAR SHIP – WITH REASONING | (10) |
| 4.2 | SHIP'S BADGE | (10) |
| 4.3 | 4.3.1 Depression (or mid-latitude cyclone or cold front) | (2) |
| | 4.3.2 Ship rolling = difficult to walk or sleep or prepare food | (3 × 2 = 6) |
| | 4.3.3 Ice flattens sea | (2) |
| | | [30] |

Total: 300 marks