



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2013

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 Less space needed for liquid fuel/longer range.
Any other pertinent answer. (2 × 2 = 4)
- 1.2 1.2.1 Any quotation of a positive nature. (2)
- 1.2.2 Any quotation that describes a frightening aspect of life aboard a sailing ship. (2)
- 1.2.3 No sails to handle/less arduous/no 'going aloft'.
Any other pertinent answer. (3 × 2 = 6)
- 1.2.4 Wind is free/environmentally friendly/rising costs of fuel.
Any other pertinent answer. (6)
- 1.3 1.3.1 North-East Asia. (2)
- 1.3.2 303 (4)
- 1.3.3 (a) Competition from road/rail/larger ships taking on short-haul cargoes. (2 × 2 = 4)
- (b) Port Elizabeth/East London/Mossel Bay. (2 × 2 = 4)
- 1.3.4 (a) No containerships are idle. (2)
- (b) Fewer containerships operate in these areas. All containerships that are in these areas are operating. (4)
- 1.4 1.4.1 Any country in Arabian Gulf.
Any country in Far East. (2 × 2 = 4)
- 1.4.2 West Africa to US Gulf. (2)
- 1.4.3 Higher rates. (2)
- 1.4.4 Petrol/diesel/ship's fuel/any other oil product. (2 × 2 = 4)
- 1.4.5 Liquid natural gas. (2)
- 1.4.6 During winter > much demand for gas for heating and lighting approach of spring > less demand for gas. (3 × 2 = 6)

[60]

QUESTION 2 SHIPPING OPERATIONS

- 2.1 No. (2)
- 2.2 Owned and flagged in Norway. (2)
- 2.3 Approve plans/monitor building/conduct sea trials to ensure she meets specifications/declare her fit for sea/regular surveys to ensure seaworthiness/ approve any modifications/survey her if any accidents and declare seaworthy before she can resume trading. (Any $5 \times 2 = 10$)
- 2.4 Lifeboats are operational/safety, fire and abandon ship drills done/proper register of crew entering enclosed spaces/any other. (any $3 \times 2 = 6$)
- 2.5 Norway. (2)
- 2.6 Any two flag state control functions. (any $2 \times 2 = 4$)
- 2.7 2.7.1 Total reefer slots – $(459 - 108 + 97) = 1800 - 444 = 1356$ slots. (8)
- 2.7.2 (a) Ship operating between hub ports and smaller, outlying ports. (4)
- (b) Containers aboard arrival Singapore =
 $40' (2\ 044 + 3\ 032 + 1\ 792 + 904) - (2\ 504 + 1\ 014 + 1\ 354) = 2\ 900$
 $20' (278 + 103 + 76 + 145) - (62 + 56 + 41) = 443$
 Capacity GP containers = $9\ 800\ TEU - (5800 + 443)\ TEU$
 = $9\ 800\ TEU - 6243\ TEU$
 Vacant slots = $3577\ TEU - 454\ TEU$
 = $3093\ TEU$
 Will only be space for 756 TEU. (10)
- 2.7.3 (a) Total number of containers = 3 000
 Number of lifts per hour = 100/hour
 Hours for cargowork = $\frac{3\ 000}{100 / hr}$
 = 30 hrs
 Plus breaks & shift changes = 3 hrs
 Total time = 33 hrs (6)
- (b) 10:00 on 29/11 + 33 hrs + 2 hrs = 21:00 on 30/11 (6)
- 2.7.4 Near the bow. (2)
- 2.7.5 FOB – Shipper pays costs up to the cargo going over the ship's gunwhale/
 consignee pays the rest.
 CIF – Shipper pays all costs. (6)
- 2.8 2.8.1 P & I (2)
- 2.8.2 Pilot launch P & I. (6)
- 2.8.3 (a) Report – award marks for clarity of expression and for recording the fact of the incident. (10)
- (b) Owner/P & I Club/Flag State/Port State. (4 \times 2 = 8)

- 2.9 2.9.1 Procedures involved in movement of container from Leiden to Rotterdam (by truck), to Singapore (by sea) and to warehouse (by truck). (10)
- 2.9.2 (a) Hollandsche sjokolade. (2)
- (b) Viking shipping. (2)
- 2.10 2.10.1 Public interest in dramatic (unusual) events. Possible pollution disaster/environmental effect. (2 × 2 = 4)
- 2.10.2 Public perception that F.O.C. ships have inferior standards. Blame is usually prevalent in public's mind. (2 × 2 = 4)
- 2.10.3 The plight of the crew. (2)
- 2.10.4 Onshore. (2)
- [120]**

QUESTION 3 INTERNATIONAL TRADE

- 3.1 3.1.1 Country A. (2)
- 3.1.2 Cheaper because of subsidy. (2)
- 3.2 Straits of Dover/English Channel/Straits of Gibraltar/Gulf of Aden/Straits/Malacca Straits. (Any 2 × 2 = 4)
- 3.3 3.3.1 IMO (2)
- 3.3.2 United Nations. (2)
- 3.3.3 '9/11' (2)
- 3.4 3.4.1
- | | | |
|----------------------|--------------------------|--------------------|
| Normal voyage | = 1 day + 8 days | = 9 days |
| Operating costs | = 9 days × \$12 000 | = \$108 000 |
| Fuel HVF | = 9 days × 64T × \$790 | = \$455 040 |
| MDO | = 9 days × 03T × \$1 096 | = <u>\$ 29 592</u> |
| Total normal voyage | | = \$592 632 |
| Delayed voyage | = 3 days + 6 days | = 9 days |
| Operating costs | = 9 days × \$12 000 | = \$108 000 |
| Fuel HVF | = 9 days × 92T × \$790 | = \$654 120 |
| MDO | = 9 days × 03T × \$1 096 | = <u>\$ 29 592</u> |
| Total delayed voyage | | = \$791 712 |
- Delayed voyage more expensive by **\$100 080**. (10)
- 3.4.2 Text of email: Use discretion and award marks for content: reasons for delay/observations of action in Port Suez/hearsay. (12)
- 3.4.3 Text of email: Use discretion and award marks for content/confirmation of passing through Suez/on passage to Felixstowe/ETA Felixstowe.

ETA Felixstowe: 00:01 on 17 Feb + 6 days = **00:01 on 23 Feb (or
midnight 22 Feb)**. (10)

- 3.5 3.5.1 Increase in ore shipments = $85\text{MT} - 45\text{MT} = 40$ million tons
 Additional ships = $\frac{40\,000\,000}{200\,000} = 200$ more ships (6)
- 3.5.2 $\frac{3 \times 100}{5 \times 1} = 60\%$ (6)
- 3.5.3 (a) Yes. (2)
- (b) Too many for one berth/overlapping calls. (6)
- (c) Extra storage tanks. (2)
- 3.5.4 Repair facility needed/additional foreign exchange/jobs will be created/
 favourable ripple effect on all repair companies/economic growth of the
 region. (10)
- 3.5.5 More tugs/more road traffic/more personnel, e.g. pilots/more training of all
 levels of work force/other relevant points. (4 × 2 = 8)
- 3.6 3.6.1 Marpol. (2)
- 3.6.2 Solas. (2)
- [90]**

QUESTION 4**MARINE ENVIRONMENTAL CHALLENGES**

- 4.1 4.1.1 Opinion regarding fines imposed: Award marks for clear reasons for
 opinions. (4)
- 4.1.2 \$1 million. (4)
- 4.2 Hurricane season/ship needs to avoid hurricanes. (4)
- 4.3 4.3.1 Into the swell. (2)
- 4.3.2 Depression (or mid-latitude cyclone or cold front). (2)
- 4.3.3 12 hours. (2)
- 4.3.4 Damage containerships/cause containers to break loose. Any one (2)
- 4.4 4.4.1 No countermeasures against poaching/fish stocks depleted/future of fishing
 jeopardised. (3 × 2 = 6)
- 4.4.2 Full research was not done/fish resources not estimated properly/no proper
 planning possible regarding future fish stocks. (2 × 2 = 4)
- [30]**

Total: 300 marks