



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2017

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 MULTIPLE-CHOICE QUESTIONS

- 1.1 B
- 1.2 B
- 1.3 D
- 1.4 A
- 1.5 C
- 1.6 D
- 1.7 D
- 1.8 D
- 1.9 C
- 1.10 A
- 1.11 D
- 1.12 B
- 1.13 A
- 1.14 A
- 1.15 B
- 1.16 A
- 1.17 B
- 1.18 C
- 1.19 B
- 1.20 D
- 1.21 C
- 1.22 A
- 1.23 B
- 1.24 C
- 1.25 B
- 1.26 D
- 1.27 B
- 1.28 B
- 1.29 D
- 1.30 C

QUESTION 2 THE MARITIME WORLD

- 2.1 2.1.1 Shorter route/Ships use less fuel on shorter routes/Cheaper
- 2.1.2 (a) Exports of gas = foreign currency/Domestic use/Other relevant answer
- (b) Cleaner fuel/Helps to reduce Chinese problems with smog/
Cheaper if imported via shorter route/Other relevant answer
- 2.1.3 Shipped to Zeebrugge/trans-shipped to conventional LNG ships for transport to China
- 2.1.4 Ice-breaking bow/ice-strengthened/Azipods that break ice
- 2.2 2.2.1 2017
- 2.2.2 Bulk carrier calls rose from 248 (2016) to 1109 (2017)/Bulkers will carry raw materials and/or steel products
- 2.2.3 2016
- 2.2.4 $\frac{700}{365} = 2$ (rounded off) (Accept 3)
- 2.2.5 Additional berths/additional discharge & loading facilities for various products/expanded access for dry bulk & neo-bulk cargoes/more container gantries/expanded container stacking area/more tanks/more pipelines/tugs/more harbour personnel/Any other pertinent answer
- 2.2.6 More production facilities = more job opportunities/more people coming to the area/more social services (education, health, etc.)/more retail outlets/improved local economy

QUESTION 3 SHIPPING OPERATIONS

3.1 Tax/crewing with any nationals/cabotage requirements/any other plausible answer.

3.2 3.2.1 $\frac{684 \text{ containers}}{(2 \times 25) \text{ per hour}} = 14 \text{ hours} + 3 + 4 \text{ hours} = 21 \text{ hours}$

3.2.2 08:00 on 10 December + 21 hours = 05:00 on 11 December

3.2.3 $(653 \times 2) + 31 = 1337 \text{ TEU}$

3.2.4 No – capacity = 1650 TEU but cargo = 1337 TEU

3.2.5 98 reefer plugs

3.2.6 05:00 on 11 December + 2 hrs = 07:00 on 11 December

3.3 3.3.1 Feeder Service

3.3.2 Hub Port

3.3.3 No

3.3.4 Yes

3.3.5 (a) Reefer (or refrigerated) containers

(b) Tank container

3.3.6 (a) Yes

(b) No

3.4 3.4.1 Consignor (Shipper)

3.4.2 Consignee

3.5 3.5.1 20 days

3.5.2 (a) $\frac{180}{20} = 9 \text{ round voyages}$

(b) Owner

3.6 3.6.1 London and Goteborg

3.6.2 Flag State/Classification Society/Port State Control/Insurers/Other

3.6.3 Raised deck near the bow

3.6.4 TT Club

3.6.5 Yes – Loss of cargo in the joint venture/damage to ship in joint venture

3.7 Off Hire

3.8 Demurrage

3.9 STCW 95/2010

QUESTION 4 INTERNATIONAL TRADE

- 4.1 4.1.1 One
- 4.1.2 Through Transport Bill of Lading
- 4.1.3 Carrier
- 4.2 4.2.1 Straits of Malacca – Between Singapore and the Indian Ocean
 Containers/grain/oil/oil products/bulk cargoes
 Important link between Asia (esp. China, Japan & Korea) and Europe
 Important oil route from Arabian Gulf to Asia
 Link between India and eastern Asia
 Any other feasible points
- 4.2.2 (a) Size (or capacity) of containerships has increased/more slots
 available/rates declined/many smaller containerships were
 withdrawn/fewer but larger containerships now
 passing through straits
- (b) Yes
- (c) Less cargo moving/Decline in demand for container space/
 Increase in capacity/Lower rates follow
- 4.3 4.3.1 35 830 tons
- 4.3.2 2 and 4
- 4.3.3 Empty holds means ballasting, esp. in ballast tanks around hold 2
 and 4
- 4.4 4.4.1 Local production becomes unprofitable/Reduces local production/
 Local steel mills close/Job losses/Loss of strategic industry
- 4.4.2 Impose import duty on imported steel/subsidise local steel industry/
 give incentives to local steel industry
- 4.5 Shipping is an international business/each voyage can involve several
 countries/need for legal matters to be resolved amid uniform
 legal framework
- 4.6 4.6.1 IMO (or International Maritime Organisation)
- 4.6.2 SAMSA

QUESTION 5 MARINE ENVIRONMENTAL CHALLENGES

- 5.1 5.1.1 Heavy swell and strong winds might cause vessels off lee shore to drag anchor
- 5.1.2 Strong wind = disruption of container operations/disruption of ships' movements
 Heavy swell = may prevent pilots from boarding inbound ships/range action
- 5.1.3 Wind speed will decrease towards the end of the time covered by the forecast
- 5.2 Shark killing = disrupts food chain/more seals/more smaller fish eaten by seals/possible reduction in fish available for fishermen/any other plausible effect

Total: 300 marks