



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2023

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

QUESTION 2 THE MARITIME WORLD

- 2.1 2.1.1 Carbon monoxide, carbon dioxide, nitrogen oxide, sulphur oxide. Any TWO.
- 2.1.2 Protection of environment, prevent air pollution, prevent global warming and its effects. Any other plausible answer.
- 2.1.3 Scrubber installation, using cleaner fuel (marine diesel oil / LNG), use of anti-fouling paint, special hull designs; special propeller/rudder designs, use of anti-fouling paint.
- 2.1.4 Lower fuel consumption, lessen greenhouse gas emissions, lessen fuel bill.
- 2.1.5 MARPOL
- 2.2 2.2.1 Container ships
- 2.2.2 Twenty-foot equivalent unit
- 2.2.3 1st quarter 2016
- 2.2.4 217 112 TEUs
- 2.2.5 $161 + 162 + 130 + 134 = 587$ ships
- 2.2.6 $(3280 + 3332 + 2474 + 2559)$ hours = $11645 \div 587$ ships = 19,84 hours. Accept 19 or 20 hours.
- 2.3 2.3.1 POSTER: Award 2 marks for each of the FOUR benefits of careers at sea – Dollar salaries/big salaries; tax-free salaries; travel the world; working with different nationalities; long leave days (8); award 2 marks for the slogan (2); and award 2 marks for a creative and eye-catching poster (2).
- 2.3.2 They proved to be relatively expensive; strong labour laws; active trade unions; want to serve shorter contracts; unemployment benefits ashore; number of lucrative careers ashore. Any TWO.

QUESTION 3 SHIPPING OPERATIONS

- 3.1 3.1.1 Ro-Ro ship / vehicle carrier
- 3.1.2 Relatively high freeboard; Ramp; More box-shaped; Bridge usually forward; Any TWO.
- 3.1.3 Liberia
- 3.1.4 She can carry a maximum weight of 16 886 tons.
- 3.1.5 STCW
- 3.1.6 LR
- 3.2 3.2.1 Greek owned and registered in Liberia/Registered in a country other than the owner's country.
- 3.2.2 Political reasons; better tax benefits; cheaper registration fees; securing a loan; securing certain trade routes (cabotage); liberty to hire crews of owner's choice; Any THREE.
- 3.2.3 Annual surveys; special surveys; declare ship seaworthy after accident; investigating accidents; approve and monitor major modifications; Any THREE.
- 3.2.4 Zero
- 3.3 3.3.1 $1700 \text{ cars} \div (2 \times 35)/\text{hour} = \mathbf{25 \text{ hours}}$
- 3.3.2 $70 \text{ vehicles} \div 10/\text{hour} = \mathbf{7 \text{ hours}}$
- 3.3.3 Began loading: 08:00 06 May + 25h + 7h + 8h + 3h = **03:00 8 May**
- 3.3.4 03:00 8 May + 4h + 3h = **10:00 8 May.**
- 3.3.5 Starboard side
- 3.3.6 Customs clearance; immigration clearance.
- 3.3.7 (a) Laytime
- (b) Charter party
- (c) P T Adamos Shipping Ltd & Jensen-Nielsen Shipping Co.
- (d) Less
- (e) Dispatch
- (f) Shipowner
- (g) Off-hire

- 3.4
 - 3.4.1 Mayday
 - 3.4.2 LOF (Lloyd's Open Form)
 - 3.4.3 No
 - 3.4.4 Ship not sinking/still valid attempts to refloat
 - 3.4.5 Port State
- 3.5 Length = 191 metres; Breadth = 38 metres
- 3.6 Flag State (Liberia) and Classification Society (Lloyd's Register)
- 3.7 Northern P&I Club (or P&I Club)
- 3.8 $(\$81\text{m} + \$1\text{m}) \div (\$81\text{m} + \$1\text{m} + \$37\text{m}) \times \$1,4\text{m} = \textbf{\$964 705,88c}$

QUESTION 4 INTERNATIONAL TRADE

- 4.1 4.1.1 Perdesen Vehicle Traders Ltd
- 4.1.2 P T Adamos Shipping Ltd
- 4.1.3 Agarwal Vehicle Distributors
- 4.2 4.2.1 Consignee
- 4.2.2 Consignee
- 4.2.3 Consignee
- 4.3 4.3.1 Straits of Dover
- 4.3.2 (North) Atlantic Ocean
- 4.3.3 $8700\text{nm} \div 19.2\text{kn} = 19 \text{ days}$ OR $8700\text{nm} \div 15\text{kn} = 25 \text{ days}$
- 4.4 Importance of Cape Agulhas: strategically positioned as mid-point between East and West. Important for bigger ships that cannot pass through the canals. Important for cargoes like iron ore, coal, crude oil, containers and all other cargoes that pass through the zone. When Suez Canal was closed in 1956 and 1967 (and the recent blockage by *Ever Given*), many ships diverted to pass via the Cape.
- 4.5 4.5.1 Customs
- 4.5.2 Subsidise production. /Impose import duties on imported cars. /
 Provide labour incentives. /Reduce any export duties on the cars.
- 4.6 4.6.1 $120 \text{ cars} \div 4 \text{ cars/cont.} = \mathbf{30 \text{ containers}}$
- 4.6.2 $30 \text{ cont.} \times \$7800/\text{cont.} = \mathbf{\$234 \text{ 000}}$
- 4.6.3 Combined Bill of Lading
- 4.6.4 Door-to-door service
- 4.6.5 Terms and conditions of carriage
- 4.7 4.7.1 Lwandle
- 4.7.2 6 days or 7 days
- 4.7.3 07 June
- 4.7.4 3 ports

QUESTION 5 MARINE ENVIRONMENTAL CHALLENGES

- 5.1 Warm moist air from tropical regions rests on the cold Benguela current. Cools down, condensation takes place, and fog forms.
- 5.2 5.2.1 Pollution (any form); deballasting foreign waters; ocean mining, also include tourism acts and poaching.
Any TWO.
- 5.2.2 Depletion of fish species, collapse of marine ecosystem, negative economic effects. Any other plausible answer.
- 5.2.3 Imposing fishing quotas, sea patrols, heavy fines and jail time for offenders, suspension of fishing licenses for offenders; any other plausible answer.
- 5.3 5.3.1 Typhoon
5.3.2 Weather-sensitive cargo
5.3.3 Knots
5.3.4 Orca
5.3.5 East London

Total: 300 marks