NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2024

MARITIME ECONOMICS

MARKING GUIDELINES

Time: 3 hours 300 marks

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QUESTION 1 MULTIPLE CHOICE QUESTIONS

1.1 B

1.2 C

1.3 B

1.4 A

1.5 B

1.6 B

1.7 C

1.8 C

1.9 C

1.10 B

1.11 C

1.12 A

1.13 A

1.14 B

1.15 C

1.16 D

1.17 A

1.18 D

1.19 B

1.20 B

1.21 C

1.22 D

1.23 C

1.24 C

1.25 B

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QUESTION 2 THE MARITIME WORLD

2.1 2.1.1 Anti-fouling paint

2.1.2 It prevents marine organisms (binnacles) from sticking on the ship's hull. This minimises friction on the ship's hull. Ship does not need more power to propel through the water, hence less greenhouse gas emissions as compared to when there was friction.

2.2 2.2.1 Coal

2.2.2 Heavy Fuel Oil

2.2.3 They can steam a longer distance without having to rebunker.

2.3 Expensive to install; requires scarce and expensive engineers; can be used as weapon by terrorists.

2.4 2.4.1 Pie-chart

2.4.2 Any suitable heading with words 'countries; seafarers'

2.4.3 China

2.4.4 Indonesia

2.4.5 India

2.4.6 502 000 + 207 000 + 250 000 + 491 000 + 200 000 + 78 000 + 402 000 = **2 130 000**

2.4.7 502 000 ÷ 2 130 000 × 100 = **23,57%**

2.4.8 STCW

2.4.9 Cheaper; poor labour laws; no unemployment benefits; less careers ashore

2.4.10 Crew members may not be familiar with the shipowner's way of doing things aboard the ships; Crew members may not develop loyalty to the shipowner as they may never work aboard that company's ships again; some may leave important work (e.g. a major engine repair) for the next person to serve in that capacity aboard the vessel.

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QUESTION 3 SHIPPING OPERATIONS

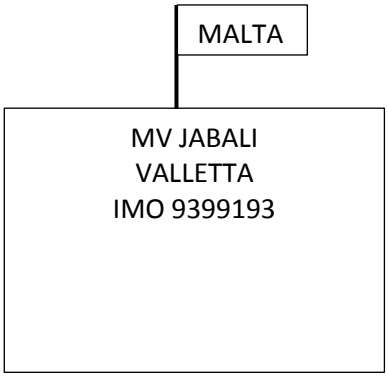
3.1 3.1.1 Time charter

3.1.2 Malta

3.1.3 Usual vessel currently on drydock/repairs; excess cargo available; seasonal cargo time.
Any two.

3.2 3.2.1 Cheaper registration fees; better tax benefits; political reasons; cabotage policies; to secure ship mortgage/loans.

3.2.2



3.3 3.3.1 An **order** at which a ship will call to different ports.

3.3.2 5 406 M ÷ 17 kn = 318 h ÷ 24 h/d = 14 d + 5 d + 1 d + 9 d
= **29 days**

3.3.3 29 d + 2 d + 2 d + 3 d + 3 d = **39 days**

3.3.4 39 d × $39 600 = **$1 544 400**

3.4 3.4.1 (a) Ship chandlers

(b) To reduce friction and prevent damage to engines and machinery of a ship.

3.4.2 Port health and Immigration

3.4.3 Book flight tickets; arrange for accommodation if necessary

3.4.4 Trimmed by the stern

3.4.5 'Also request charts South African east coast.'

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3.5 10:00 – 18:00 = 8 hours × (25 × 2) = 400 containers
4 900 – 400 = 4 500 containers remaining
4 500 cont. ÷ (3 × 25) = 60 hours
Total = 60 h + 8 h + 2 h = **70 hours**

3.6 3.6.1 2 200 + 84 + 502 + 2 × (2 700 + 1 104 + 8)
= 2786 TEUs + 7624 TEUs
= **10 410 TEUs**

3.6.2 NO

3.6.3 Twenty-foot Equivalent Unit.

3.6.4 08:00 01/03 + 2 h + 68 h = 08:00 4 March

3.6.5 Hub Port

3.6.6 Feeder service

3.7 3.7.1 Ship not in imminent danger; ship not in distress condition; did not need salvage operation; only needed towing service.
Any one.

3.7.2 Arbitration

3.7.3 Off-hire

3.8 $96 million ÷ ($96 m + $102 m + $1 m) × $1,6 million
= **$771 859, 30**

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QUESTION 4 INTERNATIONAL TRADE

4.1 4.1.1 2 160 blocks ÷ 30 b/pallets = 72 pallets
72 Pallets ÷ 6 p/container = **12 containers**

4.1.2 General containers

4.1.3 FCL

4.1.4 Billabong Aluminium

4.1.5 S&S Aluminium

4.2 4.2.1 EXW (Ex-Works)

4.2.2 DDP (Delivery Duty Paid)

4.2.3 FOB (Free On Board)

4.3 A bill of lading covering only the ocean leg was issued.

4.3.1 Carrier

4.3.2 Shipper

4.3.3 Through B/L (or Through Transport)

4.4 Indian Ocean; Gulf of Aden; Bab-El-Mandeb; Red Sea; Suez Canal; Mediterranean Sea.

4.5 4.5.1 Thofiq

4.5.2 10/05 + 3 d + 2 = **15 May**

4.5.3 10 May – 2d = **08 May**

4.5.4 SARS

4.5.5 03 May

4.6 4.6.1 ISPS

4.6.2 9/11

4.7 4.7.1 Israeli-linked vessels

4.7.2 Delays in delivery; late productions.
Any other plausible answer.

4.7.3 Cape of Good Hope

4.7.4 10% of 11 billion = 1,1 billion tons

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QUESTION 5 MARINE ENVIRONMENTAL CHALLENGES

5.1 5.1.1 Tropical Cyclone

5.1.2 Eye

5.1.3 South-West

5.1.4 True

5.1.5 Strong winds; heavy sea; rain; long and high swells.

5.1.6 Prevent crew injury; prevent ship damage, prevent cargo damage.

5.2 Ballast water exchange and ballast water treatment plant.

5.3 Double skins for tankers and for bunker tanks; more mandatory training for tanker officers and other crew members; routing of tankers in certain areas; revised procedures for tank cleaning.

Total: 300 marks

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