



NATIONAL SENIOR CERTIFICATE EXAMINATION  
NOVEMBER 2011

**MARITIME ECONOMICS**  
**MARKING GUIDELINES**

Time: 3 hours

300 marks

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These marking guidelines were used as the basis for the official IEB marking session. They were prepared for use by examiners and sub-examiners, all of whom were required to attend a rigorous standardisation meeting to ensure that the guidelines were consistently and fairly interpreted and applied in the marking of candidates' scripts.

At standardisation meetings, decisions are taken regarding the allocation of marks in the interests of fairness to all candidates in the context of an entirely summative assessment.

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, and different interpretations of the application thereof. Hence, the specific mark allocations have been omitted.

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**QUESTION 1 THE MARITIME WORLD**

## 1.1

- 1.1.1 Coal. (2)
- 1.1.2 Steam. (2)
- 1.1.3 Internal combustion engine (accept *motorship* or something similar). (2)
- 1.1.4 Automation / modern engines require less maintenance / motorships do not require stokers. (3 × 2 = 6)
- 1.1.5 North Atlantic. (2)
- 1.1.6 Southwards (accept *from the polar region* or something similar). (2)
- 1.1.7 Fog. (2)

- 1.2 Less space needed for liquid fuel / range of ships increased / routes did not have to allow for coaling / refuelling was quicker and cleaner / fewer engineroom ratings required. Any other plausible answer. Any two (2 × 2 = 4)

## 1.3

- 1.3.1 Operating costs might increase / bunker price might increase / Suez might close / Suez closure would cause huge increases in operating costs on top of other increases caused by the unrest. (4 × 2 = 8)
- 1.3.2 Cape Route. (2)
- 1.3.3 Major revenue earner / jobs would be lost if the canal closed. (2 × 2 = 4)
- 1.3.4 Military took control of the canal (or Military protection). (2)

## 1.4

- 1.4.1 Containerships. (2)
- 1.4.2 They are large (or They have large cargo capacity.) (2)
- 1.4.3 Large volume of cargo but few ships. (2 × 2 = 4)

## 1.5

- 1.5.1 Many alternative careers / living conditions ashore are good / dole / more desire for leisure / Any other plausible reason. Any 3 (3 × 2 = 6)
- 1.5.2 Unemployment / good salaries compared to those offered in home countries / less alternatives available / many young people still have contact with the sea. Any 3 (3 × 2 = 6)
- 1.5.3 Any plausible method of encouraging young South Africans to go to sea. (2)

**[60]**

**QUESTION 2 SHIPPING OPERATIONS**

2.1

2.1.1 Delhi Steel. (2)

2.1.2 Handysize / geared. (2 × 2 = 4)

2.1.3 2 580 rolls of steel. (6)

2.1.4 (a)  $\frac{8\,400 \text{ tons}}{14 \text{ tons}} = \frac{600 \text{ rolls of steel}}{6 \text{ rolls per hour}} = 100 \text{ hours} + 16 \text{ hours} = 116 \text{ hours}$  (8)

(b) 116 hours + 48 hours = 164 hours (6)

(c) 08:00 on  $\frac{24}{11} + 164 \text{ hours} = 04:00 \text{ on } \frac{1}{12}$  (6)

(d) NO. (2)

(e) Dispatch. (2)

(f) Shipowner. (2)

(g) 04:00 on  $\frac{1}{12} + 6 \text{ hours} = 10:00 \text{ on } \frac{1}{12}$  (6)

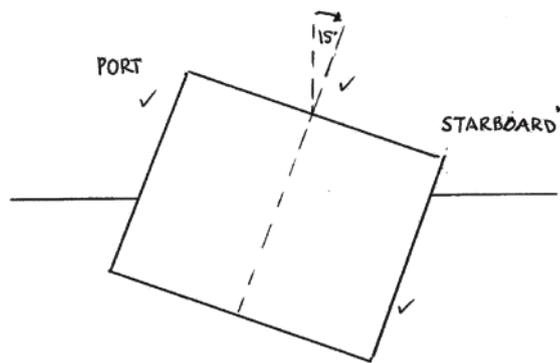
2.1.5 (a) Shipper. (2)

(b) Consignee. (2)

(c) Consignee. (2)

2.2

2.2.1



(4)

2.2.2 Port State Control (or SAMSA) / Flag State Control (or Panamanian authorities) / Classification Society (or Det Norske Veritas). (3 × 2 = 6)

2.2.3 P & I Club (or West of England). (2)

2.2.4 YES. (2)

- 2.2.5 Voyage is a joint venture between shipowner & cargo owner.  
Damage to one party had occurred.  
Joint venture was completed (ship arrived at destination).  
Payment for damage & salvage must be shared between parties. (8)
- 2.2.6 Agreement between shipowner and salvors.  
Salvage is conducted on a 'no cure, no pay' basis. (4)
- 2.2.7 YES. (2)
- 2.2.8 Tug towed vessel to port. (2)
- 2.2.9 (a) Rescue crew. (2)
- (b) Need to try to prevent damage to the environment.  
Tug would have been awarded costs and a profit (about 25%). (4)
- 2.2.10 (a) Arbitration. (2)
- (b) London (2)
- 2.3
- 2.3.1 Central America (or reasonable description of the location of Panama). (2)
- 2.3.2 YES. (2)
- 2.3.3 Registered in different country to her owners (Owned in Norway; registered in Panama). (4)
- 2.3.4 (a) Approve plans / Monitor construction / Participate in trials / Ensure vessel meets specifications. (4)
- (b) Check plan for repair / Monitor repairwork / Do inspection to ensure that vessel is seaworthy / Release her for normal trading. Any ( $2 \times 2 = 4$ )
- 2.4 Newspaper article – Award marks for inclusion of all relevant facts and quotations from ship's master and tugmaster. (14)
- [120]**

**QUESTION 3      INTERNATIONAL TRADE**

## 3.1

- 3.1.1 Straits of Hormuz. (2)
- 3.1.2 Red Sea. (2)
- 3.1.3 Arabian Gulf (or Persian Gulf). (2)
- 3.1.4  $\frac{16\,000\,000}{10} = \frac{1\,600\,000\text{ tons}}{100\,000\text{ tons}} = 16$  tankers per day (6)
- 3.1.5 Much of Arabian Gulf oil is consumed in Far East (Japan, China, Korea) or India and doesn't pass through the Canal. (8)
- 3.1.6 All tankers would be diverted via the Cape.  
Especially seriously affected would be those moving from Black Sea to Far East.  
Longer voyage = more tankers needed to replenish stocks  
Increased time = increased costs (8)
- 3.1.7 (a) Increased shipping costs = Increased cost of oil = Increased bunker costs (4)
- (b) Longer voyage = Increased shipping costs = Increased costs of goods (4)
- (c) Diverted ships would need bunkers, stores = ports would become congested (4)
- 3.1.8 Containers / Iron ore / Coal / Minerals / Grain Any (2 × 2 = 4)

## 3.2

- 3.2.1 No. (6)
- 3.2.2 (a) 332.64 metres. (2)
- (b) 20.657 metres. (2)
- (c) Via Indian Ocean, The Cape, Atlantic Ocean. (6)
- (d) Draught too great for Suez. (2)

## 3.3

- 3.3.1 Standards of Training and Certification of Watchkeepers. (2)
- 3.3.2 A watchkeeper is inadequate qualified.  
A crew member cannot display competence. (or any other) (2 × 2 = 4)
- 3.3.3 Ship will be detained / Fine imposed / Ship may not sail until compliance is met. (3 × 2 = 6)
- 3.3.4 South African Maritime Safety Authority (or SAMSA). (2)

3.4		
3.4.1	IMO	(2)
3.4.2	MARPOL	(2)
3.4.3	SOLAS	(2)
3.4.4	Loadline (or Plimsoll Line).	(2)
3.4.5	Winter North Atlantic.	(2)
3.4.6	Carriage of Goods by Sea.	(2)
3.4.7	International Ship and Port Security Code.	(2)
		<b>[90]</b>

#### **QUESTION 4      MARINE ENVIRONMENTAL CHALLENGES**

4.1		
4.1.1	(a) North East Gale with gusts of 85 knots (or similar explanation).	(6)
	(b) Wind speed will get less later (or similar explanation).	(2)
	(c) One cannot see far in the rain (or similar explanation).	(2)
4.1.2	Wind.	(2)
4.1.3	12 Hours.	(2)
4.1.4	Low Pressure.	(2)
4.2		
4.2.1	Ship's engines.	(2)
4.2.2	YES.	(2)
4.2.3	Coal gives off more smoke than oil-fired engine.	(2)
4.2.4	Letter to the Editor. Award marks for expression of opinion.	(8)
		<b>[30]</b>

**Total: 300 marks**