

THE INSTITUTE OF CHARTERED SHIPBROKERS

APRIL 2007 EXAMINATIONS

WEDNESDAY 18 APRIL – AFTERNOON

SHIP OPERATIONS & MANAGEMENT

Time allowed – Three hours

Answer any FIVE questions – All questions carry equal marks

1. Describe the characteristics (dimensions, tonnages, gear etc) of ONE of the following types of cargo ship:

- a) Panamax Bulk carrier
- b) Suezmax Tanker
- c) Geared Container Feeder Ship

Illustrate your answer with longitudinal and cross sectional drawings.
Give details of a trade in which your chosen vessel could be employed

2. Your vessels are crewed by seafarers from two nationalities, one being the officers and the second the crew. A senior officer leaving the vessel warns you of growing resentment and mistrust between officers and ratings.

Why are mixed nationality crews employed?
What reasons can you give for the problems on board?
How would you go about improving matters?

3. MV Lemon is a container ship. The vessel is approaching the terminal when the Master notices that the cargo crane gantry has not been raised. He reports his vessel's airdraft and asks for confirmation that there is sufficient clearance under the gantry. The pilot checks and receives confirmation from port operations control that there is. While going alongside the vessel's main mast hits the gantry. There is damage to the vessel's mast structure, antenna array and navigation lights. There may also be damage to the gantry crane. The gantry crane driver is badly shaken and is taken to hospital. There are no crew or shore staff injuries.

What actions need to be taken on board and by the Managers?
What insurances will the vessel have in place to cover this incident?

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4. Owners are purchasing a vessel that is 7 years old and have decided to change Flag of Registry and Classification Society immediately after delivery. Sellers have agreed to obtain certificate of deletion from registry on the day of closing. The new registry is a “Flag of Convenience”.

List the responsibilities of Flag and Class in respect of these changes. What certificates must the vessel have before it can start to trade?

5. Using the factors below:

- a) What cargo quantity can be loaded? (show calculations)
- b) What voyage result do you estimate? (show calculations)
- c) Where would you organise bunkers? What quantity would you stem? (give your reasons)

The vessel: mv Great Ship, Liberia Flag discharging Shanghai, China
Bunkers ROB on sailing expected 450MT IFO 380 cst at \$325pmt

Summer DWAT 74,756MT on 14.02M
Winter DWAT 71,789MT on 13.728M
Cubic grain 86,763.50 CuM
LOA 225m
Constants incl FW 750MT
Loaded Speed / cons 14kts on 32MT IFO 380CST
Ballast Speed / cons 14kts on 28MT IFO 380CST
Port Cons 3MT IFO 380cst pd

The Cargo: - fixed to load 55,000MT Coal (SF 1.48) 10% MOLOO Indonesia to Gijon, Spain.
No draft /size restrictions at Load port or discharge port
15000 SHINC load/ 20,000 SHEX discharge
Demurrage/ half dispatch \$25,000/d
Freight \$27.25 comm 5% FIOS

Distances:

Shanghai to Balikpapan , Indonesia – 2,062nm
Balikpapan to Singapore – 970nm
Singapore to Gijon via Suez Canal – 7,628nm

Bunkers prices:

Singapore IFO 380cst - \$260 pmt – calling costs \$2,000
Suez IFO 380cst - \$270mt – calling costs \$5000

Port/ Canal Charges: -

Load port \$35,000
Discharge port \$65,000
Suez Canal toll and agency - \$150,000

Daily Running Costs – including financing \$15,000 pd

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6. Weather Routing and voyage analysis services are widely used. What use does commercial shipping make of these services?

7. What certificates must a vessel carry as evidence of compliance with the International Safety Management (ISM) code? What skills/ competences does the issue of these certificates signify? Which body is responsible for the issue of these certificates and under what authority/ provision are they issued?

What other bodies/ parties are interested in the vessel's compliance with the ISM code?

8. A vessel under your technical management is being sold and you hope to retain the business. The new owners ask you to provide an explanation of the various types of costs associated with ship-owning.
 - a) Explain the difference between fixed costs, voyage costs and daily running costs.
 - b) List the costs included in a proforma budget estimate of daily running costs.
 - c) Under which headings would you allocate the following costs?
 - i. Annual Ship Registration fees.
 - ii. Attendance by a Classification Society Surveyor to deal with machinery surveys due.
 - iii. Deductible on a cargo claim
 - iv. Supply of Fuel Oil
 - v. Supply of Lubricating Oils and Greases
 - vi. War Risks Insurance premium
 - vii. War Risks Insurance Additional Premium
 - viii. Conversion of ship's provision rooms refrigeration plant.