

**NAROTTAM MORARJEE INSTITUTE OF SHIPPING
MUMBAI**

Examination Paper – March 2019

Fellowship / Post Graduate Diploma in Shipping Management – Final year

CHARTERING

02.03.2019

Total 100 Marks

Time: 3 Hours.

NOTE: Question 7 & 8 are compulsory and carry 20 marks each. Answer any four from the rest and these carry 15 marks each

Q1) Explain following expressions (In two or three sentences only)

- a) Arrived Ship
- b) In geographical rotation
- c) LOI
- d) Ballast bonus
- e) First class charterer

Q2) Write short notes –

- a) AFRA
- b) Baltic indices
- c) COA

Q3) Answer ALL parts of the question.

Assume you are a broker who has fixed a VLCC on subjects for 12 months CHOPT further 12 months time charter for worldwide trading with usual exclusions.

- a) Draw up a full re-cap
- b) Explain usual exclusions
- c) What 'subjects' need to be lifted before the vessel is fully fixed?

(Candidate to make logical / reasonable assumptions to attempt this question)

Q4) M.V. Marina, Summer DWT = 57000 MT Draft = 11.180 m SSW TPC= 47 Cubic grain capacity = 73875 m³ draft at loadport = 11 m, cubic bale = 69442 m³, constants + bunkers = 2000 mt. Shipowner has the option to load either woodchips at \$10 pmt or iron ore at \$6 pmt.

SF of iron ore = 14 and SF of woodchips = 90

- a) Which cargo will generate more revenue for the shipowner?
- b) Will his decision change if there is no draft restrictions at loadports? (assume, no draft restrictions at disport)

Q5) Differentiate:

- Bare boat charter and time charter trip
- Fixed laytime and calculable laytime
- VRD and FRD
- Demurrage and Despatch
- All time saved and Working time saved

Q6) What do you understand by following charter-party clauses?

- Conoco weather clause
- Ice clause for time charter parties
- Both to blame collision clause
- Non-payment of hire clause for time charter-parties
- Sub-let clause for time charter parties

Q7) Details of voyage planned for an Aframax tanker is as under-

Dead-weight : 115218 MT
 Load: Ruwais
 Discharge: Singapore
 Speed: 13.5 Knots
 Cargo quantity: 80000 MTS heated fuel oil
 Freight rate: WS 119
 Address Comm: 2.5%
 Brokerage: 2.5%
 Laytime: 72 hours SHINC (1 days loading and 2 day discharge)
 Bunker consumptions basis per day are as follows :-

	Laden	Ballast	Loadport	Disport	Heating
HO (Mts)	38	35	12	45	7
DO (Mts)	0.5	0.5	1.0	5	NIL

Worldscale website publishes WS rates as below -

Activity	Port Name	Country
Load	Ruwais	UNITED ARAB EMIRATES
Discharge	Singapore	SINGAPORE

Type	Rate (\$/MT)	Mileage	
Rate	15.02	6721	
Addition	1.40	605	via: Quorn Island
Total	16.42	7326	

Bunkers : HO - USD. 430 PMT MDO - USD. 525 PMT

Port Charges: Ruwais- USD. 30,000/- Singapore - USD. 41,000/-

Prepare voyage estimate for round voyage and calculate Time charter Equivalent per day.

Contd..... 3/-

Q8) M.V. "Golden freedom" loaded 50000 MTS of thermal coal from Cilacap coal terminal fixed on following CP terms -

- A) Load rate: 10000 MT PWD SHEX EIU
basis 5H/5H, 5 cranes
- B) NOR to be tendered if vessel in free pratique
- C) Turn Time 12 hours unless sooner commenced
- D) First shifting not to count
- E) Demurrage : USD. 8000 PDPR
- F) Despatch half the demurrage rate on working time saved
- G) Running days of 24 consecutive hours is used

SOF at load port are as follows -

Date	Day	Time (hrs)	
23 March	Wed	1200	Arrived
23 March		1200	Anchored
23 March		1250	Free pratique
23 March		1300	Nor
24 March	Thu	1100	Pob
24 March		1400	Berthed
24 March		1500	Commenced loading
30 March	Wed	1400	Loading completed
30 March		1530	Documents on board
30 March		1600	Pob
30 March		1700	Rfa / sailed

Remarks:-

25 March Friday, cargo stopped due to bad weather from 1200 hrs to 1700 hrs
 27 March Sunday loading continued till 1100 hrs
 28 March Monday 2 hatches were not used for 12 hours due to ship crane breakdown

Calculate laytime used, demurrage or despatch?

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EXAMINATION - MARCH 2019

SUBJECT: CHART.

Q	1	2	3	4	5	6	7	8	9	10	11	12	Total
M	9½			15	14	14	19	18					89½ (90)

WRITE BELOW

V-6000

Q 4 M.V. Marina SDWT - 57000 MT @ Dft - 11.180 m SSW
 TPC 47 CBG - 78875 m³
 Draft at loadport - 11 m
 Constants + bunkers - 2000 mt
 Woodchips - \$10 prmt
 Iron ore - \$6 prmt

For a vsl. DWT 57000 MT @ Dft - 11.180 m
 and the draft at LP - 11 m.

$$\therefore 11.180 \text{ m}$$

$$- 11 \text{ m}$$

$$= 0.18 \text{ m or } 18 \text{ cms.}$$

$$\therefore \text{TPC } 47 \times 18 \text{ cm} = 846 \text{ MT.}$$

$\therefore$ 846 MT needs to be deducted from
 the SDWT 57000 MT of the vsl.

$$\therefore 57000 \text{ MT} - 846 \text{ MT} = 56154 \text{ MT}$$

$\therefore$ The vsl @ dft - 11 m will load have a
 dwt of 56154 MT.

We need to deduct the constants from
 this new DWT.

$$\therefore 56154 \text{ MT}$$

$$- 2000 \text{ MT}$$

$$= 54154 \text{ MT}$$

Iron ore being a heavy cargo has the SF-14 and is fixed at \$6 pmt.

$$\therefore 54154 \times \$6 = \$324924$$

The Pmt earned by loading iron ore is \$324924.

Now, Woodchips being a light cargo has the SF-90. is a Volume based cargo.

$\therefore$ First, we need to convert SF 90 into meters to get the value in meters.

$$\therefore \frac{90}{35.32} = 2.54$$

$$\therefore DWCC = \frac{CGC}{SF} = \frac{73875 m^3}{2.54} = 29084.64 MT$$

$$\therefore 29084.64 MT \times \$10 pmt = \$290846.4$$

(a) Here at dft restriction 11m the cargo iron ore @ \$6 pmt is generating more revenue.

(b) If there is no draft restriction at load ports -

$$\text{So; } 54000 MT$$

$$- 2000 MT \text{ constants + Bunkers}$$

$$55000 MT$$

$$\therefore 55000 MT \times \$6 pmt = \$330000$$

$\therefore$ Iron ore will still generate more revenue.

Q.7 Voyage of an Aframax tanker.

Dwt - 115218 MT.

LP - Ruwais Disport - Singapore.

Speed - 13.5 Kts.

Cargo Qty - 80,000 MT @ WS 119.

Addr Commission 2.5% } = 5%
 Brokerage 2.5%

LT - 72 hrs (1 day LP; 2 days disport).

Route	Qty.	WS	Frt.
Ruwais - SGP - Ruwais	80,000	119	\$16.42 (WS 100)
			\$19.53 (WS 119)

Here, @ WS 119

$$119 \times \$16.42 / \$100 = \$19.53$$

Voyage details

At sea (LP)

11.3

At sea (DP) (B)

11.3

Loadport

1

Disport

2

Heating

0

Total no. of days. 25.6 days.

$$\text{Round distance} = \frac{7326}{2} = 3663 = \frac{271.34}{13.5 \text{ kts}} = \frac{271.34}{24} = \underline{\underline{11.3 \text{ days}}}$$

Bunkers

	L	B	LP	DP	Heating	Total
HO	38×11.3	35×11.3	12×1	45×2	7×0	
DO	0.5×11.3	0.5×11.3	10×1	5×2	0	

$$HO \quad 429.4 \quad 395.5 \quad 12 \quad 90 \quad 0 = 926.9$$

$$DO \quad 5.65 \quad 5.65 \quad 1 \quad 10 \quad 0 = 22.3$$

→ Direct operating expenses -

Port charges -

Ruwais - \$ 30,000

Singapore - \$ 41,000

\$ 71,000

Total Bunker cost.

$$HO - 926.9 \times \$430 \text{ pmt} = \$398567$$

$$DO - 22.3 \times \$525 \text{ pmt} = \$1207.5$$

\$ 399774.5

$$\therefore \text{Total D.O.E} = \cancel{\$399774.5} \$470774.5$$

Gross Frt. =

$$80000 \text{ MT} \times \$19.53 \text{ pmt}$$

$$= \$1562400$$

$$\left. \begin{array}{l} \text{Leas. comm.} \\ \text{Brokerage} \end{array} \right\} 5\% = \$78120$$

$$\therefore \text{Net Frt.} = \$1484280$$

$$\times \text{G.O.P} = \text{NF} - \text{DOE}$$

$$= \$1484280 - 470774.5$$

$$\text{Total G.O.P} = \$1013505.5$$

$$\therefore \text{TCV} = (\text{G.O.P} / \text{voydays})$$

Q.8. MV. Golden Freedom.

loaded 5000 MT of thermal coal from
Cilacap coal terminal fixed on load rate
10,000 MT PWD SHX EIU.

Basis 5H/5H, 5 cranes.

LIT commences - NOR + 12 hrs T/T = 24th Mar 00:01 hrs.

Particulars are as follows:

Date	Day	Time (Hrs)	Time Used ¹ DD HH MM	Remarks
24 MAR	THU.	00:01 - 11:00	00: 11: 00	LIT commences NOR + 12 hrs.
		14:00 - 24:00	00: 10: 00	first shifting 11:00 - 14:00
25 MAR	FRI	00:01 - 12:00	00: 12: 00	
		17:00 - 24:00	00: 07: 00	Bad weather 12:00 - 17:00
26 MAR	SAT	00:01 - 24:00	01: 00: 00	
27 MAR	SUN	00:00 - 00:00	00: 00: 00	SHX EIU.
28 MAR	MON	00:01 - 12:00	00: 12: 00	12 hrs crane breakdown
28 MAR	MON	00:01 - 00:00 ^{only 3 cranes working.}	00: 00: 00 00: 07: 50	

Considering only 3 cranes were functioning.

$$\therefore 3 \times 5H = 15/12 \text{ hrs} = 1.25$$

29 MAR	TUE	00:01 - 24:00	01: 00: 00
30 MAR	WED	00:01 - 14:00	00: 14: 00
			02: 63: 50

$$= 111 \text{ hrs } 50 \text{ mins.}$$

Laytime allowed - 50,000 MTS = 5 days.

LIT taken - 4.625 days

LIT allowed - 5 days

LIT saved - 0.375 days

Assuming the time
taken to place documents
on board was -
1 hrs 30 mins.
LIT does not count
and expenses are
on shipowners account.

2. Demurrage - USD 8000 pday. (half despatch)

$$\text{Despatch} = \$4000 \times 0.375 \text{ days}$$

= \$1500 to be paid to charterers

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~~Things to remember~~

~~Things to remember~~

Q 1.

a) Arrived Ship

i) A ship is considered to 'arrived ship' as per the charterparty only in certain conditions -

a) the ship must be at the required loadport / disport.

b) the ship must be at a required port / berth

c) ship is arrived - when the ship is ready to load or discharge both in all capacities valid.

2/2

ii) A ship is arrived ship also when the terms of the C/P require it to be at and/or in a range of ports.

b) In geographical rotation -

a) The term geographical rotation is a significant term of the C/P. It is used when the owner or the charterer wants or have agreed in the C/P to load or discharge within a particular range of ports.

b) Say, the charterer wants to discharge the cargo from a range of ports between Singapore to East coast of India. So, the owner has to give instructions

rotation of ports (so that the vessel does not end up venturing south - then north - then again south).

2 1/2 c) this term is agreed upon because the costs of loading, discharging and other expenses including bunkers could be on shipowner's account.

c) Letter of indemnity:

the 'letter of indemnity' is a official document which signifies the details of the parties who have the indemnity right over the other.

2 1/2 a) say the charter carried out certain repairs to the hull in a time charter which were known to the shipowner and the vessel was delivered with the LOI - stating that the shipowner will indemnify any expenses occurred by the charterers on account of repair work.

b). The accounts are anyways settled between the charterer and owner but in order to avoid any dispute, a LOI is a full proof way to ensure accountability.

Formulae:

GOP (NF - DOE) : TCY (GOP / voy days)

NOP (TCY - Standby charges)

Bmk. even flat rate = total op. charges - total flat

US 100 (published rate / flat rate)

And - add/sub to the loaded cargo

And - add/sub to the flat rate

→ direct treatment to

WRITE BELOW

Q. 1. d) Ballast Bonus.

a) Ballast Bonus is the money or amount given to the shipowner by the charterer when the charterer is unable to re-deliver a ship at port decided in the c/p.

b) This ballast bonus is so given, since the charterer was unable to find suitable cargo at the re-delivery port.

c) Ballast bonus is also given when the charterer ~~wants the delivery of~~ the ship ~~and~~ at a port and the ship has to ballast till there, so ballast bonus helps shipowner to cover the expenses of the ballast leg.

(e) First class charterer

a) a first class charterer (FCC) is who has the clear record and has pending disputes and whose dues past or present stand clear.

Q. 5. a) Bareboat charter

i) a bareboat charter is a C/P which gives the charterer the whole rights of the vessel.

ii) BBC / demise charter makes the charterer a virtual owner of the ship.

iii) BBC allows the ship to be employed in manner w/ the desired loading and carrying of cargo.

Time charter trip.

i) In TCT, the charterer hires the ship for a specified period of time and only for a trip.

ii) In TCT, the charterer only has the right to use the ship and the manning, maintenance fall of shipowner.

iii) TCT too allows the charterer to load cargo of his choice but w/ the conditions that the ship will be delivered in a okay to load condition. i.e., if ore was loaded in a generally grain carrying ship, the ship's holds have to be cleaned as per terms.

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b) Fixed LIT

i) a fixed laytime (LIT) is when a ship or charterer is given a set (certain no. of days for loading as well as discharge

Ex: LIT given 5 days
 LIT taken 4 days
 $\therefore$ LIT saved 1 day

Here the owner has to pay despatch to the charterer at half the demurrage rate.

Calculable LIT

i) Calculable LIT is when the charterer is given the load rate and/or discharge rate and qty. is specified.

Ex

Ex: Qty: 65000 MT
 load rate 9000 MT-IP
 discharge 10000 MT-DP
 $65000 / 9000 = 7.2 \text{ days}$
 at the load port.

Here if the charterer takes more than 7.2 days to load then he has to pay full demurrage.

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ii) Fixed laytime is mostly in case of tanker where traditionally the LIT including SHEX or SHINC is 72 hrs

Calculable LIT exists in dry cargo market where the loading or discharging will take more time.

c) VRD

FRD

(i) VRD or Variable Rate Differential is the rate or amount which is specified by the WS organization and is added to the qty listing freight rate for certain voyage.

in FRD. Fixed Rate Differential is the rate which is specified by the WS organization and is added to the qty of cargo loaded.

(ii) VRD is directly added or subtracted to the flat/published rate i.e., WS 100.

(ii) FRD is treated to the qty loaded
 ex:- main qty - 80,000
 B/L qty - 82,000
 $\therefore$ FRD of say - 0.22\$
 will be added/subd to the B/L qty.

(iii) VRD for ~~main~~ voyages involving discharge at ULSAN (SEM 1) require a VRD of \$0.22 to be subtracted.

(iii) FRD for voyages involving loading at IRAN (Kharg Island) require a FRD of \$0.22 to be added. ~~to fr.~~

WRITE BELOW

d) Demurrage	Despatch
(i) Demurrage is money or amount receivable by the shipowner for the delay in the operations of loading and discharge by the charterer.	(i) Despatch is amount receivable by the charterer from shipowner for completing the cargo operations before the LIT expiry.
(ii) Demurrage is payable when laytime expires before completion of cargo operation Ex: - Laytime allowed 4 days LIT taken 5 days Excess LIT 1 day. $\therefore$ Demurrage - \$10,000. For 1 day excess LIT consumed.	(ii) Despatch is payable only before when cargo operations is completed before LIT expiry Ex: LIT allowed 4 days LIT taken 2.5 days LIT saved 1.5 day Despatch half of demurrage $\therefore 1.5 \times \$5000 = \7500
(iii) Demurrage is present both in Dry cargo as well as Tanker trade.	(iii) Despatch system is not practiced in tanker trade as the their LIT is fairly fixed

(e) All time saved	Working time saved.
i) All time saved is a method to calculate the demurrage or despatch payable by charter to owner or vice versa	i) Working time saved (WTS) is used to calculate the same demurrage & despatch only by removing all holidays and excursions.
ii) ATS is calculated by counting the working days as well as the holidays SHEX, SHINC, FHEX.	ii) WTS is calculated by counting the working days only. say - C/P contains SSHEX EIU and no IUATC is mentioned then only the working days will decide the LT and hence the demurrage or despatch.

Q. 6. The charter party clauses -

a). Conoco weather clause -

The 'conoco weather clause' is used in the tanker charterparty which stipulates that if there is a bad weather experienced during any cargo operation then only half the time will count.

This clause has received both-positive and negative remarks as the use of Conoco weather clause on one hand benefits the ship owner - as in a bad weather the charter will not be able to claim full time as an exclusion.

Ex: Bad weather from

12:00 to 01:00hrs

∴ only 30 mins will count.

Similarly, the conoco weather clause is not beneficial to the charter as in a situation where the bad weather exists for say over 2 days and the cargo operation mainly loading and discharging in a tanker c/p the LIT if runs beyond given/allowed LIT the charter will have to pay the demurrage.

Ex: Bad weather from

2nd March 12:00hrs - 4th March 12:00hrs

∴ the 2nd March 12:00 - 24:00

3rd March - full 24:00hrs

b) Ice clause for T/C/P.

Ice clause is a clause inserted in a C/P which states that no ship which is not an ice class ship is not to be sent in an area or port which is prone to ice conditions.

c) Both-to-blame collision clause.

This clause states that, in an occurrence of a collision ~~the~~ both the ships / vsl are to be blamed for the extent of damage.

Though the damage is apportioned and not vague, both vsl have to make good the loss.

Say - vsl ship A - 60% collision liability
 ship B - 40% "

∴ ship A and ship B will pay the percentage of ~~loss~~ blame of each other on the amount of loss.

Ship A	Ship B	
3,000,000	8,000,000	Damage to ship
-	-	Cargo
-	-	Injury
60%	40%	Blame

WRITE BELOW

d) Non-payment of hire clause for T/C/Ps -

This clause stipulates that in case of non-payment of the hire in a time c/p the shipowner can exercise Lien over the charterer's cargo or equipments or any despatch or amount receivable by the charterer.

e) Sub-let clause for time C/Ps -

The charterer when has the control of a ship under time charter party can sub-let the ship further to some other charterer and claim the hire accordingly.

Though, in any case the primary charterer will be responsible and accountable for the costs and expenses due to the shipowner.

Good

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— x — x —