

**NAROTTAM MORARJEE INSTITUTE OF SHIPPING**  
**MUMBAI**  
**Examination Paper – March 2024**

**Fellowship/Advance Diploma in Shipping Management & Logistics – Final Year**

**RISK MANAGEMENT & MARINE INSURANCE**

**09.03.2024**

**Total 80 Marks**

**Time: 3 Hours.**

**Attempt question 1 and any other FOUR questions.**

**Total FIVE questions have to be attempted. All questions carry equal marks (16 marks).**

Qu.1. Answer the following in at least FIVE lines. Marks will be awarded on the basis of the clarity of thought and reasoning: [4\*4]

- (a) A ship had a fire which resulted to the damage to the ship. Can the ship owner claim for this damage from its Hull and Machinery insurance?
- (b) A large bulk carrier is in ballast and has engine breakdown during a voyage when the ship is passing near an island. The Master drops an anchor so that the drifting ship does not run aground. The vessel is saved and in the meanwhile the engine starts and the ship continues on its original voyage. In this process the ship lost the anchor and the chain. Can general average be claimed?
- (c) A shipper hands over the container to the ship owner for transportation to a specified place for delivery to the consignee and also pays the required freight. Can the Shipper insure the freight paid?
- (d) A stevedore died on board a vessel while engaged in discharging general cargo. The family claims from the ship owner. Can the company recover this claim from its H&M insurance?

Qu.2.

- (a) Why are P&I insurers called as ‘Clubs’? [3]
- (b) Explain the pooling arrangement of the 12 clubs under the International Group. [7]
- (c) A ship owner has purchased a second hand bulk carrier. List five liabilities which the ship owner may be exposed to and which may be insured. Liabilities should not be of similar types. [6]

Qu.3.

- (a) What is the difference between actual and constructive total loss? Explain with suitable examples. [8]
- (b) What is the importance of the notice of abandonment? [8]

Qu.4.

- a) Explain the importance of York Antwerp Rules. [3]
- b) A ship is valued at 10 million \$ and carried one cargo consignment valued at fifteen million \$. During the voyage the ship suffered fire damage to the ship worth 500,000 \$. The cargo worth 900,000 \$ was also damaged in fire. A bulkhead had to be cut to reach the fire with an estimated cost of repairs to be \$ 100,000. Cargo worth \$ 1,500,000 got damaged while fighting the fire. Charges for firefighting tugs were \$ 500,000. The voyage was saved and completed. Calculate

- |      |   |     |
|------|---|-----|
| i.   | Total amount of GA                          | [3] |
| ii.  | Both contributing values                    | [5] |
| iii. | Amount of GA contributed by both interests. | [5] |

**Qu. 5.** Write short notes on any FOUR of the following: [4\*4]

- (a) Open policy
- (b) Assignment
- (c) Perils of the sea
- (d) Fixed premium clubs
- (e) Transit clause

**Qu.6.**

- (a) Explain the difference between pure and contractual salvages. Who pays for the salvage? [8]
- (b) What is SCOPIC and why is it required? [8]

**Qu.7.**

- (a) What is the meaning of the collision liability of a ship? [3]
- (b) Ship A collided with ship B and both ships are damaged. Following are the details:

	A	B
Insured value	2,000,000	5,000,000
Damage to ship	500,000	3,000,000
Deductible under hull policy	80,000	150,000
Deductible under P&I policy	10,000	20,000
Blame	70%	30%

Calculate:

- i. Collision liabilities of both ships [2]
- ii. Liabilities of hull underwriters of A and B. [4]
- iii. Liabilities of P&I Clubs of A and B. [4]
- iv. Amount that will have to be paid by the two owners. [3]

**Qu.8.**

- (a) Institute Cargo Clauses (A) is referred as an 'all risk' cover policy – explain this statement. Are there any losses/ damages that will not be covered under these clauses? [8]
- (b) Clarify if the shipper or the consignee has insurable interest in the insurance of cargo? [4]
- (c) Explain forwarding clause in cargo insurance [4]

**Qu.9.**

- (a) What is the difference between marine and other insurances? [8]
- (b) Principle of subrogation is related to the principle of indemnity – discuss. [8]

Month MARCH Year 2024 TOTAL MARKS *(Total 91/31/24)*

Subject RISK MANAGEMENT &amp; MARINE INSURANCE

Q	1	2	3	4	5	6	7	8	9	10	11	12	Total
M	14		12	16		13	15						70

WRITE BELOW

ANSWER NO. 7 (a)*V Gaur*COLLISION LIABILITY:-

Collision liability is the liability for the damage caused to other vessel as a result of collision.

The following liabilities are covered :-

- 1) Damage to hull/machinery or property on other vessel.
- 2) Delays or subsequent loss of employment to other vessel as a result of collision.
- 3) General average & salvage charges for the other vessel.
- 4) Pollution damage, injury to persons on the other vessel.

For e.g.

Two vessel A & B have collided & B have suffered damages of 2 million \$ & blamed 50% on vessel A.

In this example total collision liability of vessel A will be  $\frac{50}{100} \times 2 \text{ million} = 1 \text{ million } \$$ .

ANSWER NO. 7 (b)

Vessel A's calculation:-

Damage to the vessel A = 500,000

Collision liability for damage to vessel B  
= 70%

$$= \frac{70}{100} \times \text{damage on vessel B}$$

$$\rightarrow \frac{70}{100} \times 3,000,000$$

$$= 2,100,000 \quad \checkmark$$

$\frac{3}{4}$  of the <sup>above</sup> collision liability

$$= \frac{3}{4} \times 2,100,000$$

$$= 1,575,000$$

$$\frac{3}{4} \text{ of insured value} = \frac{3}{4} \times 2,000,000$$

$$= 1,500,000$$

As per H&M policy max  $\frac{3}{4}$  collision

liability will be  $\frac{3}{4}$  of the insured value

∴ claim paid under  $\frac{3}{4}$  collision liability  
will be 1,500,000

Amount to be paid by P&I for  $\frac{1}{4}$  th +  
excess of  $\frac{3}{4}$  =  $(1,575,000 - 1,500,000)$

$$+ 525,000$$

$$= 6,00,000$$

Amount recoverable by <sup>B</sup> for damage on A

$$= \frac{30}{100} \times 500,000$$

$$= 150,000$$

### V/L B calculation

Collision liability for damage on v/l A

$$= \frac{30}{100} \times 500,000$$

$$= 150,000$$

$\frac{3}{4}$  of the above collision liability

$$= \frac{3}{4} \times 150,000$$

$$= 1,12500$$

$$\frac{3}{4} \text{ insured value of } B = \frac{3}{4} \times 5,000,000$$

$$= 3,750,000$$

$\frac{1}{4}$  of the above collision liability (Paid by P&I)

$$= 375,00$$

(i) Collision liability of A = 2,100,000

Collision liability of B = 150,000

(ii) Liability of hull underwriter of A :-

Partial damage on A = 500,000

$\frac{3}{4}$  for damage to B (max  $\frac{3}{4}$ ) =  $(+)\ 1,500,000$   
insured value

Recoverable by B (30%) =  $(-) 150,000$

Total liability by hull underwriter = 1,850,000

Deductible  $(-) 80,000$

Final payment by A = 1,770,000

Liability of hull underwriter of B

Partial damage to B = 3,000,000

$\frac{3}{4}$  for liability for damage to A =  $(+) 112,500$

Recoverable by A (70%) = 2,100,000

Total liability for hull underwriter = 1,012,500

Deductible  $(-) 150,000$

Final payment by B's hull underwriter = 862,500

(iii) A's P&E club liabilities

$$= 75,000 + 5,25,000 = \underline{6,00,000}$$

(excess of  
 $\frac{3}{4}$ thm)  
 $\frac{1}{4}$ thm for damages  
B)

Deductible = (-) 10,000

Final liability of A's P&E club = 590,000

B's P&E club liabilities :-

$$\frac{1}{4} \text{ of the A's collision} = \frac{1}{4} \times 150,000$$
$$= \underline{37,500}$$

Deductible = (-) 20,000

Final liability of B's P&E club = 17,500

(iv) Deductibles will be borne by owner

For A :-

H & M deductible = 80,000

P&I deductible = 10,000

Total Paid by owner A = 90,000

For B :-

H & M deductible = 180,000

P&I deductible = 20,000

Total Paid by owner B = 170,000

#### ANSWER NO. 4 (a)

##### IMPORTANCE OF YORK ANTWERP RULES:

- York Antwerp Rules are a set of rules which help in general average concept.
- These rules can be incorporated in the B/L, contract of assignment or other contract of carriage.
- There is a paramount rule.
- Also there are altered rules (A - G) which

sets the principle of general average & give definitions etc.

- There are also 18 numbered rule which give the circumstances, situations, sacrifices & expenditures for the GA.
- The ~~numbered~~ rules take precedence over ~~numbered~~ rules.
- ~~numbered~~ rules to be used only in the situations when GA can not be established using the examples & sacrifices given in the numbered rules.
- The rules have been revised time to time but the 1994 rules are most commonly used.

#### ANSWER NO. 4 (B)

General average loss to ship :-

$$\begin{array}{rcl}
 \text{fire damage} & = & 500,000 \$ \\
 \text{bulkhead repair} & = & 100,000 \$ \\
 & & 600,000 \quad (1)
 \end{array}$$

$$\text{Expenditure for fire fighting} = 500,000 \quad (2)$$

$$\begin{array}{rcl}
 \text{Total of (1) \& (2) i.e. ship's loss + expenses} \\
 & = & 1,100,000 \quad (3)
 \end{array}$$

General average for the cargo :-

$$\text{cargo damaged in fire} = 900,000$$

$$\text{cargo damaged in fire fighting} = 1,500,000$$

$$\text{Total cargo loss} =$$

ANS NO. 4 (B)

Only losses/expenses/sacrifices due to firefighting will accrue for GA as they are intentional & reasonable.

General average loss for ship :-

$$\begin{aligned} \text{Bulkhead cutting} &= \$ 100,000 \\ \text{Fire fighting charges} &= \$ 500,000 \\ \text{Total GA for ship} &= \$ 600,000 \quad (1) \end{aligned}$$

$$\text{Cargo damage in firefighting} = \$ 1,500,000$$

— (2)

$$(i) \therefore \text{Total GA amount} = \text{equation (1) \& (2)}$$

$$= \underline{\underline{2,100,000}}$$

(ii) Net arrived value of ship (NAV)

$$\begin{aligned} &= 10,000,000 - \text{Fire damage} - \text{GA loss} \\ &= 10,000,000 - 500,000 - 100,000 \\ &= 9,400,000 \end{aligned}$$

Contributory value of the ship

$$\begin{aligned} &\text{NAV + GAL} \\ &= 9,400,000 + 100,000 \\ &= 9,500,000 \quad (3) \end{aligned}$$

Net arrived value of cargo

$$\begin{aligned} &= 15,000,000 - 900,000 - 1,500,000 \\ &= 12,600,000 \end{aligned}$$

Contributory value = NAV + GAL

$$\begin{aligned} &= 12,600,000 + 1,500,000 \\ &= 14,100,000 \quad (4) \end{aligned}$$

$\therefore$  Total contributory value = (3) + (4)

$$= \underline{\underline{23,600,000}}$$

(iii) Contributory % =  $\frac{\text{GA}}{\text{Contributory value}} \times 100$

$$= \frac{2,100,000}{23,600,000} \times 100 = 8.898\%$$

~~✓~~

∴ GA contribution by ship

$$= 9,500,000 \times 8.898\%$$

$$= \cancel{853,100} \$ 845310$$

$$\text{less ship owner's GAL} \Rightarrow (-) 600,000$$

$$\begin{array}{r} -253,100 \\ \hline 245310 \end{array}$$

∴ shipowner will pay ~~253,100~~  $\$ 245310$

to cargo owner

GA contribution by cargo owner

$$= 14,100,000 \times 8.898\%$$

$$= \cancel{128,1266,180} 1,254,618$$

$$\text{But shd cargo GAL} = (-) \underline{1500,000}$$

$$\underline{245,382}$$

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cargo owner will receive  $\$ 245,382$  from the shipowner.

The difference in the above 2 figures is due to % contributing value taken upto 3 decimals.

### ANSWER NO 1 (A)

The damage to the ship is due to fire.

This fire is an insured peril under the Institute hull clause 1982.

So, the owner can claim ~~it~~ this damage due to fire from ~~the~~ hull & machinery insurance.

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Risk covered - Perils of the sea, fire

By the nature of shipowning, the shipowner has insurable interest in the property.

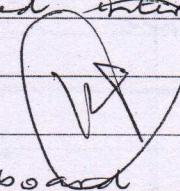
1(B) The intentional loss of the anchor in this case is reasonable as it has saved the ship which is involved in maritime adventure.

Though the rse is for ballast, this intentional & reasonable loss is covered as general average as per clause 11 of the insurance & same can be extorted claimed from the  hull & machinery underwriter.

1(C) In this case, the freight is prepaid & the shipper is at risk in case of non-fulfilment of the voyage due to any circumstances.

The shipper can add the value of the freight paid in the value of the cargo being shipped & it will be insured as freight insurance.

The shipper has incurred interest in the container's cargo.



1(D) A steward dying on board is a 3rd party liability which is not covered by the H & M insurance.

This kind of liability like steward dying on board is covered by P&L club of the shipowner.

So, in the above case, the claim can be recovered by the P&L club not from the H & M insurance.



Subject Risk Management &amp; Marine Insurance

WRITE BELOW

ANSWER NO. 3 (a)ACTUAL TOTAL LOSS:- As per marine insurance act

An actual total loss is where

- the property is damaged / destroyed completely.
- it loses to be a kind of a thing it was insured like ~~cement becoming case due to contact damage with water.~~
- the owner is irretrievably deprived of possession of it.

e.g. a ship lost at sea & no news heard of it after a considerable time.

6 ✓

CONSTRUCTIVE TOTAL LOSS:- As per marine insurance act, there is a constructive total loss where

- the owner is deprived of the physical possession of it.
- the property is so damaged that the cost of its repairing would exceed its value.
- the cost of its recovering would exceed its value when recovered.
- the cost of reconditioning & forwarding it to the destination would exceed its value at the final destination.

E.g.: - a vessel grounded &amp; wrecked.

a bale of silk damaged due to flooding.

### ANSWER NO. 3 (B)

#### NOTICE OF ABANDONMENT:-

In case of constructive total loss, the insured has to give notice of abandonment to the insurer in a timely manner.

If a notice of abandonment is not given, same will be considered / treated as a partial loss and claims will be settled accordingly.

But to accept, the notice of abandonment it is upto the discretion of the insurer.

Because once the insurer has accepted this notice of abandonment, it will be subrogated to all the right & remedies of the insured.

In the above case of CTL, there will be many additional expenses like removal of wrecks, removal of pollutant etc. which are very high amounts in expenditure.

So, normally the insurer does not accept the notice of abandonment but gives the claim for the total loss. & the insured take care of the expenses related to wreck removal, pollutant removal, & other legal & administrative fees.

(iii)

18.3

ANS NO. 6 (a)PURE SALVAGE

Also known by other name as maritime salvage.

This is a kind of salvage when a volunteer acts to preserve / save the maritime property in danger / distress.

There is no need for a pre-existing contract between the salver & the property to be saved.

The maritime property must be in real danger / exposed to peril. The danger may not be immediate but must not be inevitable.

The following features are there in a pure salvage i.e. maritime salvage.

- i) The act must be voluntary.
- ii) The property must be in danger / distress.
- iii) The peril has to be real.
- iv) The salver is entitled to a remuneration for the saved value of the ship/ property.
- v) It works on the concept of "No cure No Pay" which means that the salvage has to be successful.
- vi) The salver can't claim for the award.

The remuneration was been kept to promote the act of salvage operation.

CONTRACTUAL SALVAGE:-

This kind of salvage act is not volunteer and it involves a pre-existing contract for carrying out the salvage operation.

(a) SALVAGE CONTRACT

This contract will ~~have~~ contain terms & conditions related to salvage operations, & will define the rights & obligations of the salvor & the property to be saved.

The contract for the salvage operation can be carried out on Lloyd's open form. This forms have many versions latest being 2011 but lot 1995 is most commonly used.

The salvage remuneration is decided on per Article 13 & 14 of the salvage convention.

WHO PAYS FOR THE SALVAGER?

There are 2 payments which are come across while carrying out the salvage operation

(1) Article 13 award :-

This amount is paid by the  hull & machinery under writer of the insured

(2) Article 14 payment :-

This amount is paid by the P&I club of the shipowner.

JASWANT SINGH

Month MARCH

Year 2024

Subject Risk Management &amp; Marine Insurance.

**WRITE BELOW****ANSWER NO. 6 (B)****SCOPIC :-**

Scopic stands for special compensation in P&I clause.

Before Scopic there were few problems.

- (i) Geographical restriction for the payment/renumeration in case of risk of pollution which was applicable only in the territorial sea or inland waters.
- (ii) The salvor has to prove that there was possibility of damage to the environment and they have minimised or prevented the pollution.

To overcome above 2 problems, ISU (international salvor union) & international group of P&I clubs came up with Scopic.  
Under Scopic

- (i) No cure some pay
- (ii) There is no geographical restriction issue
- (iii) No need to prove that there was a chance/possibility of damage to environment

The Scopic details are as following.

- can be invoked at any time by salvor.
- The award under Scopic will be applicable from the time of invoking the Scopic not from the time of operation.

- the ship owner has to submit a guarantee of 3 million in 2 days.
- The charges will be based on the tariff of equipment + 25% uplift.
- The ship owner can withdraw from SCOPIC by giving 5 days notice.
- The ship owner has the option of sending SCR (salvage casualty representative) to represent him for the salvage operation. Underwriter also has the same option.
- The salvor will give the report to the SCR. In case he disagrees with this report, he can prepare a dissent report.

#### WHY SCOPIC WAS REQUIRED:-

Before SCOPIC, to

claim the remuneration under article 14, the salvor has to prove that there was a threat of damage to the environment & they have acted accordingly to minimise or prevent the environmental damage from pollution.

Also there was geographical restriction that this threat has to be there in the territorial waters or inland sea/ waters. The geographical restriction was acting as a deterrent to carry out the salvage operation.

So, to overcome above 2 problems, the International salvage unions & International group of P&I clubs came with the concept of SCOPIC.