

**NAROTTAM MORARJEE INSTITUTE OF SHIPPING
MUMBAI**

Examination Paper – March 2019

Associateship/Post Graduate Diploma in Shipping Management – First Year

CURRENT SHIPPING ENVIRONMENT

03.03.2019

Total 100 Marks

Time: 3 Hours.

NOTE: ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

1. Write short notes on any four of the following.

a) PSC	b) INTERCARGO
c) INSA	d) CFS
d) UNCTAD	f) BIMCO
2. Explain Ship's Registry and Flag state. Explain in detail FSC's functions, responsibilities and its importance.
3. What is Piracy? Discuss present Piracy scenario and its effect on shipping and role of IMB.
4. What is Ship Management? Explain technical management in detail.
5. What is Contract of Affreightment (COA)? What are advantages and disadvantages of such contract arrangements?
6. Explain International Maritime Organization and its functions with organigram. Also discuss importance of IMO in Global shipping.
7. Discuss importance of Tanker ship vetting by oil majors.
8. What is importance of OPEC in oil industry? What factors decide price of Crude oil?

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EXAMINATION - MARCH 2019

SUBJECT : CSE

Q	1	2	3	4	5	6	7	8	9	10	11	12	Total
M		14	15	17		17	15						128

WRITE BELOW

Q.2. Ship's Registry and Flag State.

ISC's functions responsibilities and its Importance.

When a ship is built or constructed in a country by a person who is the owner of the constructed ship, it becomes mandatory for him to register the ship with the country in which it is built or in any other country.

This is because a ship is a property and for it to have a belonging and for a purpose of identity it has to be registered.

If the ship is built in India, it automatically comes under the purview of Indian Merchant Shipping Act 1908 for it to be registered.

By enforcing this Act the country of registration ensures that all dues pertaining to registration are paid by the owner. He cannot escape paying of any dues levied upon him for registration.

Some ship owners register their ship with foreign countries and it is called "Foreign Registeries" (FOC)

This allows shipowners to escape a lot of scrutiny and he is allowed the freedom to operate his ship with the least stringent rules under (FOC) flag countries.

Here, when he registers a ship with a particular country, that country allows him

to operate his ship under that country's flag. For eg. If an Indian shipowner registers his ship in Liberia, his ship will operate with the Liberian flag and Liberia becomes the Flag State of that ship.

This preference of registering ships with a foreign country is very intentional & called Second Register.

By doing this the owner experiences a lot of benefits: Multinational crew appointed on two wages

- Taxation is nominal or non-existent
- Ease of Registration.
- No interference in operation by Flag State.
- Freedom to appoint crew of choice of owner.
- Transference of ownership of vessel is possible very easily.
- Crew costs are considerably reduced b'cos there are no stringent rules to be followed.
- Registration costs are also not very high
- Owner stands to profit as his operation costs come down due to manning.

Thus overall operating a ship in a Foreign Registry with a Foreign flag (namely Liberia, Panama, Malta) gives the owner a lot of flexibility and cost cutting operation of his ship.

In India IRS is the Registering Body. (Indian Register of Shipping) who attained IACS status after complying with stringent rules of the Classification Society.

When a ship is registered or is operating by flying the flag of a particular state or

country it becomes mandatory on that country to impose certain rules that the ships should adhere to. The Flag State Control should perform a no. of checks to ensure that the rules laid out by IMO are followed. It is mandatory for the Flag State

- to check the construction of the ship and see that she is sea worthy. (Hull Maintenance, P+I Clubs etc)
- to check the machinery, equipment, lights, generators etc are operational, else to see that the problem is attended to.

- to check on the well being of the crew, their facilities the victualling needs, medical needs, insurance and any other is taken care of.

- Documentation & all required certificates are in proper maintenance.

- SOLAS implementation is followed.

- Accidents or injuries on board are promptly reported so that action can be taken ^{at} ~~on~~ ^{or} ~~time~~ ^{time}.

However it has been seen that Flag State Authorities do not adhere to their functions diligently.

As a result of which there are a lot of mishaps and accidents reported and the crew are poorly paid and suffer a lot of harassment at the hands of the owner.

The crew at the time of accidents are not able to reply or act promptly as they are unable to understand the language of the others.

This poses a serious risk to the ship, the crew and the ~~sea~~ in general.

The Flag State should not ...

perform their duty diligently so that they do not ~~do~~ endanger the ships and the life of the crew.

They should follow the slogan

"Safe + Secure Ships in Clearer Oceans"

Q.3 Piracy, Present Scenario, Effect on Shipping and Role of IMB

Piracy is a term that is used when a person or group of persons board a ship to cause intentional damage to it or the crew.

This generally happens when the ship is sailing through high seas, or even when she is anchored for discharging cargo.

There are areas in the world which have seen pirate activity on high seas.

These are in the Far Indian Ocean or the west close to (Somalia), on the West Coast of Africa in the Atlantic (New Guinea) and in the Philippines Sea.

Pirates attack ships plying these areas generally in the middle of the night armed with knives or guns + board ships usually using hooks.

They are very rough and are ready to kill if they are met with resistance.

They generally attack ships with low freeboard. They are not interested in anything except money kept in the lockers safely.

These pirates belong to countries that are economically backward and have a very poor life.

Their social-political life is very unstable.

As the pirates are so dangerous ships plying these routes are constantly under severe tension.

The world community took notice of this and under IMO's guidelines have taken measures to evade Pirate Attack. ***

The pirates were attacking at night so ships were encouraged to keep access to all their valuables closed and shut.

*** These measures adopted were at the behest of International Maritime Bureau which also follows IMO's guidelines.

Ships were encouraged to keep the deck lights off except the ones for navigation and the lights not so bright amidships.

• They attacked using rope ladders so crew that kept watch were armed with knives to cut the rope.

• The deck doors and crew accommodation doors were kept closed so that the pirates could not attack.

• The crew were trained well to correspond in a manner that would not attract attention if attacked.

• The crew were trained to inform authorities if they were attacked.

• These were some of the measures adopted by ships plying in the areas of Piracy Attack.

It became very difficult for huge ships that wanted to traverse the Suez to constantly be subjected to this problem.

✓ Today the problem has reduced as naval vehicles have started accompanying the ships & clearing these areas.

Now the piracy attacks have shifted their base to West Africa (as it has seen an increase in piracy attacks).

The IMA has proposed and encouraged ships to use 2 methods SHIPLOC and SECURE SHIP.

One method involves the whole ship exterior to be electrified. ~~When~~ On the eventuality of a pirate attack this system electrifies the exterior and discharges a current which causes the pirates to fall back into the sea. At the same time it generates an alarm so loud to make everyone on board that they are under attack.

The other method involves the fitting of an alarm system which can be picked up by the satellite anywhere in the world. This is a silent alarm that consists of a box having a GPS transmitter + a bent antenna and batteries in case of power failure. This system complies with INSMART system of technology.

All these methods adopted, dissuades PIRACY and pirates in general. IMA and IMO keep a constant check on shipping routes to ensure that the ships plying a particular route are safe.

Thus adoption of IMO guidelines can help the shipping world tremendously and IMA has proved to be of great contributor in ensuring that our ships are safe on high seas.

Q. 4. Ship Management, Technical Management.

When a shipowner engages a ship for a voyage then he has to take care of a number of requirements of the ship and its crew.

The ship may be going on a voyage for many days or few days. It is important that all the needs of the ship and crew are met when they are on voyage.

The shipowner may attend to all these needs himself or he may give this responsibility to someone. This could be in the form of a "Ship Management Company".

A Ship Management Company is one that helps the shipowner to operate his ship smoothly and efficiently without the hassles of ~~be~~ himself doing it on its own.

The Ship Mgmt. Company now will take charge for a certain remuneration to operate the ship.

There are three aspects of Ship Management that the company is responsible for.

- * The Technical Management
- * Manning
- * The Commercial Management.

The owner now may ask the company to look after the Technical Operation and Manning of the ship and keep the Commercial Management for himself. He may also ask the Management Company to take charge of all three operations.

Ship Mgmt. has thus tremendously improved the performance of ship management companies as the years have progressed.

The Ship Management Company looks after the Technical Requirements of the ship. Let us explore these requirements.

- Construction and Maintenance of ship + its parts.
 - Registration of ship.
 - Maintenance of ship's equipment and parts.
 - Certificate of Tonnage, Load Lines, MARPOL, STCW, SOLAS, etc are in order.
 - Lighthouse dues are paid.
 - Documentation are in order.
 - Negotiation for freight rates.
 - Organising for berth and berth time.
 - Cargo loading and unloading operations are scheduled.
 - Fresh water for crew and stores are equipped.
 - Navigational lights are working.
 - Certificates of crew are in order.
 - Appointment of Personnel to move cargo to warehouse if required.
 - Health Certificate Clearance obtained.
 - Customs Authorities are notified about Cargo in warehouse.
 - Arrangement of MTO if necessary.
 - If it is a tanker then strict rules are followed according to SOLAS + MARPOL while discharging cargo.
 - P + I Clubs Insurance ~~done~~ taken.
 - Supervise loading and unloading of cargo.
- These include all procedures and requirements to be adhered strictly as per IMO regulations.
- (The Ship Mgmt Company is recognised and has standards according to ISM standards.) This

WRITE BELOW

Q. 6. International Maritime Organisation

Functions with Organogram

Importance of IMO in Global Shipping.

Slogan of IMO - "Safe and Secure Shipping on Cleaner Oceans".

IMO or International Maritime Organisation is an authority that sets standards for the operation of ships. It follows the principle of prevention of injury to life at sea, prevention of loss of life and prevention of damage to the Environment and prevention of damage to the SHIP at large.

The IMO came into existence with only the US and Canada initially but later grew to a number greater than 100 with many countries becoming members.

The ship is an entity and it has to be run efficiently in order to achieve good economic progress for a country through trade and development. She has to be in prime condition if she has to perform well.

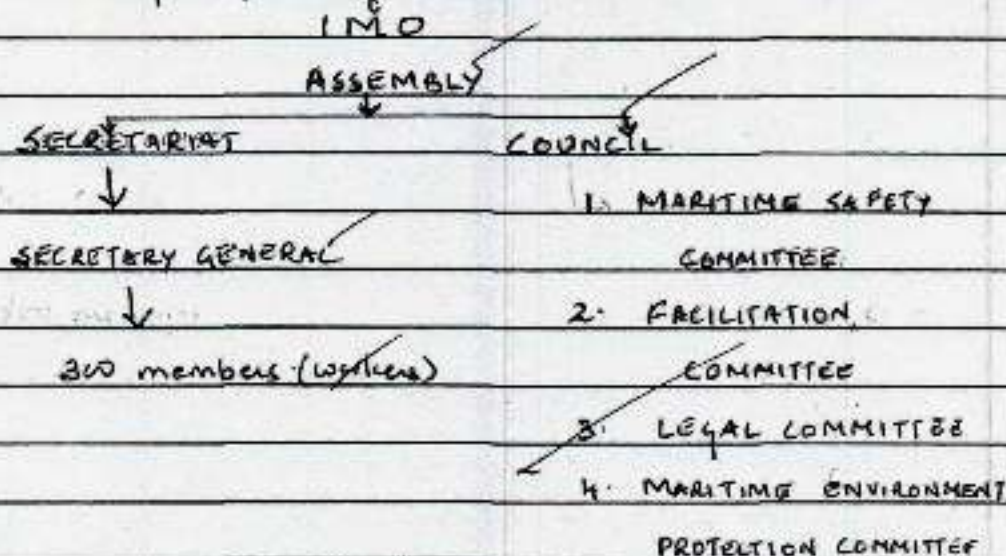
Many shipowners and countries across the world were not very careful in the operation of ships. This resulted in loss of life, damage to the ship and damage to the environment.

Hence a need was felt to bring some kind of standardisation and uniformity in the ownership and operation of ships.

The IMO collects data of ships manufactured, or constructed, its ownership, its service, routes that she operates on, her condition maintenance.

the owner, crew etc., adherence to rules etc through the SIRE programme for tankers.

All this work requires a lot of manpower. Hence let us see the ORGANISATION of the IMO.



SUB COMMITTEES meet every year + in between if required

Maritime Safety Committee takes care of (SOLAS) requirements

1. Load Line Certificate
2. Tonnage Certificate
3. Construction of Ship
4. Fire and Safety Measure
5. Search and Rescue Operation
6. Standard of Training and Watchkeeping
7. Bulk Carrier
8. Bulk Carrier for hazardous goods
9. Navigational Aids
10. Fishing

Maritime Environmental Pollution Committee takes care of

1. Pollution due to wreckage
2. Pollution due to garbage
3. Pollution due to oil discharge

4. Pollution due to Oil Spill.
5. Pollution due to Hazardous Cargo.
6. Pollution due to Ballast Water.

The Assembly is elected + meets every 2 years.
 It consists of a Council of 40 members of countries.
 Out of these 40 members, 10 members are members who are interested in providing shipping services. These countries in this are China + Japan.
 The next 10 members are members who are interested in doing trade and development with the other countries. eg. India + UAE.
 The next 20 members are from countries that have an interest in shipping eg. Liberia + Panama.
 The Assembly looks over the Draft of Policies suggested by the Council.
 The Assembly has a Secretariat which has 300 workers to assist in the Assembly's work.
 The Assembly also decides on the Budget and gives its approval.
 The Secretary General during the period 1974-81 was "HANU RIKH PRASAD SRIVASTAVA".
 He served as a Secretary General for 4 Terms.
 It was a matter of great pride for our country.

- The Council meets every 2 years and
- It plans and collates suggestions and opinions of all member countries.
- It puts the budget proposal before Assembly.
- It also does work within the purview of the Assembly.

~~The~~ IMO does not make rules and regulations.
A proposal is put forward in the Assembly with all the member countries present. The proposal has to be ratified to become a convention.

SOLAS came into effect only after 25% of the countries whose fleet exceeded 50% agreed to it.

The Assembly also brings a convention into force through RATIFICATION PROCEDURES

It is not necessary to be a member of IMO but, following its standards is extremely important.

eg. Nepal is land locked country, but, if a ship ^{trades with} ~~owned by~~ Nepal then adherence to the rules of IMO becomes mandatory.

- IMPORTANCE

The Maritime World has definitely seen a systematic, effective and good implementation of IMO convention in recent years. This implementation by member countries has resulted in our ships being safe, our lives being safe and our oceans being safe, thus echoing the slogan:

"Safe and Secure Shipping in Cleaner Oceans"

Some IMO Conventions are :-

L.L. 66 (Load Lines)

Tonnage 69. Tonnage Certificate

MARPOL 73/78. Prevention of Pollution.

COLREG 72 (Prevention of Collision At Sea)

STCW

* SAR

WRITE BELOW

Q.7. TANKER SHIP VETTING BY OIL MAJORS.

Shipping is a volatile and dynamic business. A ship is a means of earning revenue for the owner, for trade and development of a country and its economic progress.

Tankers are ships that carry liquid cargo through out the world.

13+2
+1 They are generally used in the trade of CRUDE OIL mainly + also other liquids.

Since crude oil is a commodity that is highly volatile and inflammable, its handling requires a lot of knowledge and care.

EXON VALDEZ a ship operating the PRICE WILLIAM ALASKAN COAST just hit aground that resulted in the OIL SPILL that was 7 million tonnes. This oil spread throughout the coastline and destroyed the flora and fauna in the region. People living in the region till date have suffered health issues ranging from Asthma to Auto Immune Diseases. There was a need felt for some checks in the operation of Oil Tankers.

Thus British Petroleum (BP) an Oil Major made it compulsory for all ships operating out of BRITAIN to conform to a "VETTING PROGRAMME OF SHIPS".

Ships who did not conform i.e. Tanker ships, were not allowed to enter their ports. Slowly because of necessity of trade & economics, Tankers around the world started conforming to the "SHIP VETTING PROGRAMME".

This programme was an inspection conducted by officials ~~for~~ tankers, for any leaks or damages to them.

If a tanker did not have their ship vetted then it was made publicly known of the ship's identity.

This programme ensured that the ship, human life and the sea were safe.

Who can ask for vetting?

Anyone in the safety interest of the ship could ask for the ship to be vetted.

Someone in the crew also could ask for vetting.

When the official who is well knowledgeable comes aboard for ship's inspection he asks the master to fill two reports/forms.

1. VIQ

2. VPQ

VIQ - ^{Information} Vessel ~~Inspection~~ Questionnaire
VPQ - Vessel Particular Questionnaire

All Information regarding the ship has to be given. This does not give any rating to the ship but gives ^{particular} information in detail.

Both these forms are mandatory and must if the vessel has to be vetted.

The inspector goes around the ship with the

Officer on board and asks questions. He writes his comments and observations down in the report. When he completes his inspection he gives the report to the Master.

The Master checks the comments made by the Inspector and then this Report is submitted electronically via the "SIRE" programme.

This procedure helps the Master to know if the ship has passed all checks for operation. If there are repairs or suggestion that need to be carried out the Master should do it immediately so that no life is endangered at sea and no lives are not at risk.

The SIRE programme is "Ship Information Report Exchange". Through this exchange, owners, oil majors, charterers, will receive information about the condition of the tanker, the ship owner, kind of crew, nationality of crew, registration of ship, change of registration of ship etc.

So the nature of the owner, whether he charges or opts for FOC, how he treats his crew members does he adhere to safety norms etc.

All this information becomes available on the screen in one second.

The "SIRE" programme by Oil Majors (BP) and following BP other major ~~oil~~ ~~major~~ have also started their own "Ship Vetting Programme". Thus all Tankers plying on oceans have to compulsarily adopt this programme or else they may be black listed from operations in the