

**BHARATHIARUNIVERSITY: COIMBATORE-641 046**  
**PG DIPLOMA IN CHARTERING AND SHIP BROKING MANAGEMENT**  
**(For the CCII students admitted from the academic year 2016-17 onwards)**

**SCHEME OF EXAMINATION**

S. No:	SUBJECT	Ins.Hrs./ Week	Examination			
			Dur. Hrs.	CIA	Uni. Exam	Total
<b>SEMESTER - I</b>						
1	Evolution of Shipping Industry	3	3	25	75	100
2	Shipping Finance & Insurance	3	3	25	75	100
3	Management Information System	3	3	25	75	100
4	Chartering	3	3	25	75	100
5	Dry Cargo Chartering	3	3	25	75	100
<b>SEMESTER - II</b>						
6	Port Agency	3	3	25	75	100
7	Ship Management Practice	3	3	25	75	100
8	Shipping Laws	3	3	25	75	100
9	Management of Multimodal Transport	3	3	25	75	100
10	Industry Internship / Major Project*			-	-	100
<b>TOTAL</b>						<b>1000</b>

\*For Project Report 80% Marks & Viva-Voce 20% Marks

## 1-EVOLUTION OF SHIPPING INDUSTRY

### OBJECTIVE:

The students will be introduced to the origin of shipping, its evolution and modern outlook

### UNIT - I

Introduction to Shipping - Origin of Transport System - Various inventions and inventors in Transport Systems - Various means of Transport - Branches of Shipping - Citations from the Vedas about shipping - Citations from the Book of Genesis about Shipping - India's role in shipping development.

### UNIT - II

Shipping Geography - Usage of Maps and Atlas - Resource Geography - Economical Geography - Industrial Geography - Agricultural Geography - International Trade Geography - Transport Geography - Advantage of Canals and Rivers - Oceans and Seas - Ocean route

### UNIT - III

Origin of Ships -Authentication - Origin of Documents - Reminiscence from the Maritime history - Ships and Vessels - Those men who braved the sea - HMS Victory the living legend - Age of Navigation - European expansion and Colonisation - Age of Sails and paddles - Age of Steam - Maritime events during World War 1 and World War 2

### UNIT - IV

Ships with Sails - Ships with Oars and Paddles - Various types of ships - Ships Positions - Main Branches in Shipping - Various roles in Shipping - Cargo stowage space in ships according to the nature of cargo - World tonnage - 20th century development - Multimodal Transport System

### UNIT - V

Comparison Ocean and other means of Transports System - Railways - Lorries and Trucks - Air craft's - River - Ocean Transport System - World's Largest Ship owners - Ports in India - DG shipping - mercantile marine department - port health - port authorities - customs and central excise authorities - plant quarantine authorities - income tax and reserve banks.

### Reference

1. Oxford Encyclopedia of Maritime History
- 2) Indian Maritime History
- 3) The Spanish Armada by Robert Appleton

## **2–SHIPPING FINANCE & INSURANCE**

### **OBJECTIVE**

To help students understand shipping investment and financial risks involved, ship registration and tax implications, process of sale and purchase of ships, marine insurance, third party liability and claims processing

#### **Unit I – Financing of Ships & Risks**

Financing of Shipping Business – Equity and debt issues – The basic secured loan & how it differs when the asset is a ship – The ship mortgage – Financing of new building ships – Appraising risk on shipping investment

#### **Unit II – Ship Registration & Tax**

Ship registration, Tax issues & depreciation policies – swaps and options in Ship financing – Sale & lease back – Derivatives in shipping finance – Analysis of the share price movements of a public limited company

#### **Unit III – Sale & Purchase of Ships**

Sales and purchase of secondhand ships – Financing of secondhand ships – Analysis of standard Ship Sale and Purchase contracts – Role of ship sale brokers – Demolition market dynamics

#### **UNIT IV – Marine Insurance**

General principles of Marine insurance – Marine insurance market structure – Effecting marine insurance cover – Types of marine insurance covers – Institute clauses – war & strike clauses – Marine insurance claims process – Marine Insurance claims during general average situations

#### **UNIT V – Third Party Liability**

Principles of Protection & Indemnity (P&I) insurance – Types of P&I covers available & their modes of operation – Third party liability claims processing – Insurance cover for Pollution claims – Insurance cover for professional indemnity

#### **References:**

Shipping Finance – Graham Burns & Stephenson Harwood (3<sup>rd</sup>Edn, Euromoney July 2006)  
Ship Finance: Credit expansion the Boom Bust Cycle – Peter Stokes (2<sup>nd</sup>Edn, LLP Professional Jan 1997)

Ship Sale & Purchase – Lain Goldrein Q.C and Paul Turner (4<sup>th</sup>Edn, Informa Maritime & Transport Dec 2008)

Marine Insurance: Law and Practice – Professor Francis Rose (Informa Professional Jun 2004) General Average: Law and Practice – Francis World (Informa Professional 1997)

Marine war risks – Michael.D.Miller (3<sup>rd</sup>Edn, Informa Professional Jun 2005)

### 3 - MANAGEMENT INFORMATION SYSTEM

#### OBJECTIVE:

To help students understand how MIS is developed and implemented for various levels in an organization, the phases involved in the development of a system, the factors determining their success and the relationship of MIS with various functional areas of organization

#### UNIT – I:

Foundations of Information Systems: A framework for business users - Roles of Information systems - System concepts - Organisation as a system - Components of Information Systems - IS Activities

#### UNIT – II:

IS for operations and decision making: Marketing IS, Manufacturing IS, Human Resource IS, Accounting IS and Financial IS - Transaction Processing Systems- Information Reporting System - Information for Strategic Advantage

#### UNIT – III:

DSS and AI: DSS models and software: The decision making process - Structured, Semi Structured and Unstructured problems; What if analysis, Sensitivity analysis, Goal-seeking Analysis and Optimizing Analysis - Overviews of AI, Neural Networks, Fuzzy Logic Systems, Genetic Algorithms - Expert Systems

#### UNIT – IV:

Managing Information Technology: Managing Information Resources and technologies - IS architecture and management - Centralised, Decentralised and Distributed - EDI, Supply chain management & Global Information technology Management.

#### UNIT - V:

Security and Ethical Challenges: IS controls - facility control and procedural control - Risks to online operations - Denial of service, spoofing - Ethics for IS professional - Societal challenges of Information technology.

#### Reference:

1. James A O'Brien, "Management Information Systems", Tata McGraw Hill, Fourth Edition, 1999.
2. Effy Oz, "Management Information Systems", Vikas Publishing House, Third Edition, 2002.
3. Kenneth C Laudon and Jane P Laudon, "Management Information System", 9th Edition, PHI, New Delhi, 2006.
4. Waman S Jawadekar , "Management Information System Text and cases", Third Editions, Tata McGraw-Hill ,2007.

## 4- CHARTERING

### OBJECTIVE:

This chapter will provide the students with knowledge about chartering practices prevailing in the industry and also provide insight in to contracts, disputes and resolution

#### Unit - I

Introduction- Types Of Ships For The Trade; Major Cargoes; Producing Areas And Trades, Their Movement; Methods Of Cargo Handling For Dry Cargo And Tankers. Chartering Market- Different Players, Sale Agreements, FOB,CIF; Factors Influencing Supply And Demand; Role Of Brokers; Baltic Exchange, Various Freight Indices And BIFFEX.

#### Unit - II

Chartering Contracts – Voyage, time, bareboat-cum-demise charters; contract of affreightment - different standard charter party forms for dry cargo and tankers – their salient features -Abbreviations and other chartering terms and definitions.

#### Unit – III

Chartering market practice – offer, counter offer, negotiations, and finalization of fixture - Do's and don'ts of a chartering manager

#### Unit IV

Tanker Chartering- Crude oil and various types of products movement; oil terminals - Oil transportation, India scene - Technical aspects – cleaning of tanks; heating; inert gas system; crude oil washing; clean ballast tanks; segregated ballast tanks; segregated ballast tanks; double hull, Chartering markets oil majors and traders; OPEC, INTERANKO OCIMF.

#### Unit - V

Charterparty disputes: Voyage Charters – arrived ship; laytime calculations; deductions from freight; excepted periods. Time Charters – off – hire periods; final voyage; payment of hire; bunkers performance clauses. Frustration of charter party - Oil transportation – losses and claims -Calculation of demurrage - Worldscales; voyage estimates and calculations – AFRA - Post – fixture

### **REFERENCES**

1. Carting practice (Analysis of C/Ps) – J. Bes, 1<sup>st</sup> Ed.1960 (Barker)
2. Ocean Freight & Chartering – C.F.H. Cufly, 1<sup>st</sup> Ed. 1970(Crossby)
3. Chartering Documents – H.Williams, 3<sup>rd</sup> Ed. 1996(LLP).
4. Shipping &Charting Practice – Gorton , 1hre, etc. 4<sup>th</sup> Ed.1995 (LLP)

## 5 - DRY CARGO CHARTERING

### OBJECTIVE:

This course offers good understanding of Dry Cargo Chartering and associated subjects of markets, commercial requirements, documentations & trade travel estimates.

### Unit- 1

Dry Cargo Ships- Types of Ships - Safe Working Load - Self Trimming – Tweendeckers - Cargo Stowage - Cargo Gear - Air Draft – LASH; Dry Cargo Ship – various Tonnages, Loadlines, Dimensions and Cargoes - Tonnage-Displacement Tonnage-Deadweight-DWAT-DWCC-Plimsoll Lines-Grain Capacity-Bale Capacity-Types of Cargoes.

### UNIT-2

Freight Markets and Market Practice - Baltic Exchange-Charterer-Ship Owners-Flag of Convenience-Agency Agreement-Operators-Ship Brokers-Trading-Letter of Credit-Market Reporting- Chartering Contracts - List of Voyage charter party Clauses-Elements of Voyage Charter party-List of Time charter party Clauses-Bareboat Charter

### UNIT-3

Financial Elements of Charter parties - Dead freight-Bill of Lading-Bunkers / laytime formats – laytime importance - Laytime - Calculation of Laytime- List of Very Important Decisions all port related delays , clauses for calculating laytime and exemptions in charter party for calculating laytime.

### UNIT 4

Voyage Estimating - Itinerary-Cargo Quantity-Expenses-Income-Result-Demurrage Trades-Despatch Trades-Port Charges - Bill of Lading and Cargo Claims - Functions of B/L-Elements of B/L-Types of B/L-B/L at Loading port-B/L at Discharging Port-Waybills-Insurance-Cargo Damage-Hague Rules-Hague Visby Rules-Carriage of Goods by Sea-Seaworthiness-Himalaya Clause.

### UNIT-5

World Trades Ships for Cargoes- various dry cargo tramp trades- Various cargoes for ships size wise - Handy size-Trading Restrictions-Port Restrictions - Navigation restrictions – political restrictions - appointment of cargo claims - Disputes and Professional Indemnity P&I Clubs- Maritime Arbitration -interpretation of the charter party clauses

### Text Books:

1. Dry cargo chartering by institute of chartered ship brokers.
2. Witherby seamanship international limited - second edition

### Refrence Books :

- 1.Lambert M surhone , Miriam T.Timpledon – Port agency /charterering.
- 2.Shipping Biography Introduction: Jacob Kamm, Sean Connaughton, Gustaf Erikson, Robert Moran, Sir George Renwick, 1st Baronet, Llc Book, 1994.

## 6. PORT AGENCY

### OBJECTIVE:

This course is intended to familiarize the students with basic details associated with ship like safety certificate, flag etc and the key role played by the agents as intermediaries in streamlining the shipping operations.

### UNIT-1

Ship Introduction- Sizes-Bulk Carrier-Tweendeckers - Tankers- Chemical & Parcel Tankers- Gas Carriers-Specialized Dry Cargo Ships Registration & Classification Flags of Convenience-Offshore Flags-Port State Control-Classification

### UNIT-2

Port Agent's Role in Charter party negotiations/Implementation. Safety Certificates and Surveys - Safety Certificates- Loadline Certificates-Cargo Gear Certificate-Maritime Declaration of Health Certificate-Surveys and Inspections Charter parties - Time Charter-Delivery-Owner's Agent

### UNIT-3

Time Counting - Importance of Time-Notice of Readiness-Demurrage and Despatch-Statements of Facts & Timesheets-Stoppages, Operations - Arrangement and Supplying of Services Upon Behalf of Principal-Cargo-Ship-Crew Repatriation-Desertion-Mail.

### UNIT-4

Cargo Documentation - Letter of Indemnity-Collecting Freight-Discharging Port Agent and Bill of Lading-Functions of Bill of Lading-Mate's Receipt-Manifest, Geography of Trade - political Factors-Labor - Port-Places of Source-Economic Factors-Environmental Issues.

### UNIT-5

Port Agents and Law - Introduction-Practical Duties and Obligations-Noting Protest-P&I Associations-General Average-Sensible Precautions taken by Prudent Port Agent, Relationships with Principals - Introduction-Disbursement Accounting-Division of Costs-Final Disbursement Invoice-Operational Accounting-Office Organization

### Text Books:

1. Introduction to shipping , institute of chartered ship brokers.
2. Witherby seamanship international limited - second edition

### Reference Books :

1. Lambert M surhone , Miriam T.Timpledon – Port agency

## **7. SHIP MANAGEMENT PRACTICE**

### **OBJECTIVE**

To help students understand organization chart of a shipping company, functioning of various departments' viz. commercial, technical, crewing, and ship management

#### **Unit I – Shipping Company Structure**

Organization of a shipping company – Roles of Commercial, Technical & Crewing departments – In house vs outsourcing of Ship Management functions – Ship Registries, National vs Open Registries – Ship Classification societies

#### **Unit II – Commercial Operations**

Commercial operations related to voyage – Chartering – Voyage estimates – Time charter yield calculations – Bunkering operations – Factors affecting vessel performance – Post fixture Management – Lay time calculation – Demurrage, Despatch calculation

#### **Unit III – Technical Management**

Technical Management – Ship acquisition methods – Induction of a vessel in the fleet – Planned maintenance & emergency repairs – Dry-docking and annual / special surveys – Management of ship spares

#### **Unit IV – Crew Management**

Crew Management – Manning regulations, international conventions viz. STCW, SOLAS – Crew management companies – Maritime training establishments – Maritime Training administration – Port State Control

#### **Unit V – Ship Management**

Standard Ship Management contracts (BIMCO Shipman) – International Safety Management (ISM) code – ISMA code of Ship Management Practice

#### **References:**

Ship Management (Business of Shipping) – Malcolm Willingale (4<sup>th</sup>Edn, LLP Professional Publications 2005)

Professional Ship Management – Panayides P (Ashgate Publications 2001)

Guidelines on ISM Code – International Shipping Federation (ISF 3<sup>rd</sup> Edition, New Guidelines 2010)

Commercial Management in Shipping – R.Tallack (Nautical Institute)



## 8. SHIPPING LAWS

### OBJECTIVE

This paper provides the student with an understanding of how shipping Laws are framed and practiced and the importance of Business Ethics in the role of managers in their profession.

#### Unit I

Law of Contract – general principles, essential features of a contract, types of contracts– Indemnity and Guarantee. Law of Agency – general principles, types of agencies, legal relationship between the parties involved, breach of warranty of authority and termination of agency

#### Unit II

The Indian Bills of Lading Act 1856 – The Indian Carriage of Goods by Sea Act 1925 – The Indian Lighthouses Act 1927 – The Inland Steam Vessels Act – The Indian Port Health Rules. Maritime and Possessory liens – claims - order of priorities; subjects maritime liens ; arrest and jurisdiction

#### Unit III

Indian Ports Act, 1908 - Port officials, their powers and duties – port dues, fees and other charges - Major port Trusts Act, 1963, The Indian sale of Goods Act, 1930 – Sections 18 to 25 – Transfer of property in Goods, Convention on Facilitation of International Maritime Traffic 1965

#### Unit IV

Law of Carriage – Hague Rules, Indian Carriage of Goods by Sea Act, 1925, Hague- visby Rules and Hamburg Rules. Collision law Related convention and apportionment of blame. Salvage and Towage - Related contracts; Lloyds Open Form Limitation of Liability of carrier – Related conventions and Admiralty Jurisdiction

#### Unit V

Maritime Arbitration – methods of dispute resolution - The Arbitration and Conciliation Act 1996- Marine Frauds – Preventive measures and role of international Maritime Bureau. International Conventions related to pollution claims – civil Liability Protocol 1992 and Fund protocol 1992, OPA 1990.

### REFERNCES

1. Maritime Law of India – Dr.Nagendra Singh, 1<sup>st</sup> Ed.1979 (Bhandarkar)
2. Major Port Trusts Act, 1963 – A.B. Gandhi, 1st Ed. 1982 (Milan)
3. The Merchant Shipping Act, 1958 – J.S.Gill, 1994 Ed (Bhandarkar)
4. Mulla on the Indian Contract Act – H.S. Pathak, 11th Ed. 1995 (Tripathi)
5. Maritime Law – C.Hill, 2nd Ed. 1985 (LLP)
6. International Commercial & Maritime Arbitration – F.Rose, 1st Ed. 1988.
7. Arrest of Ships – C.Hill, 1st Ed. 1985 (LLP)
8. Shipping Law – Chorley & Giles, 8th Ed.1987(Pitman)

## 9. MANAGEMENT OF MULTIMODAL TRANSPORTATION

### OBJECTIVE:

The student will be able to understand the need for multimodal transportation operations (MTO), the related tariffs applicable to air/rail/road/sea routes and optimum management of the operation.

### UNIT I

International Distribution and Role of Logistics-Unitisation-Containerisation-Multimodalism-Airfreight-Evolution of Global Economy-Multimodal Trade Routes-Basic Intermodal Systems- Economy of Scale- Ports, Terminals and Depots- Inland Container Depots - Multimodal Trade Routes-Trade Growth-Factors affecting Mode and Route Choices-Hypermarkets-Supermarkets and Departmental Stores - Operators of Multi-modal Transport and Logistics Services-Vessel Operators-Airlines-Road Transport-Outsourcing Logistics Management-Inhouse Logistics Management.

### UNIT II

Through Transport Pricing-Tariffs and Freight Rates-Modern Freight Tarrifs and Pricing-Creating through Transport Prices - Inventory Management and the Supply Chain-Inventory-Just In Time-Integrated Supply Chain Inventory Management

### UNIT III

Fleet Size-Owning versus Leasing-Meeting the Demand for Containers - Operators of Multimodal Transport and Logistics Services-Vessel Operators-Airlines- -In house Logistics Management-Corporate structures in Multi-modal Transport-Computer Applications in Multimodal Transport - Equipment Inventory

### UNIT IV

Sale Contracts and Documentation-Sale Contract-Incoterm-Bill of Lading-Bill of Lading Clauses-Waybills-Liability and Insurance-Paperless Trading - Conventions Relating to multimodal Transport-Cargo Liability Conventions-Customs Conventions.

### UNIT V

Statutory Regulations and Restrictions-National and International Restrictions on the movement of Goods - Multi modal transport act of India customs duties and free trade areas various service contracts applicable and related exemptions - IATA and international ship owning organizations –road transport organizations-

### Text Books:

1. Multimodal containerized transport for export and import by N.Rengaraj/N.Viswanath.
2. Multimodal transport rules by Hugh M kindread., M.R.Brooks

### Reference Books:

1. Multimodal transportation of goods act-1993 by professional book publishers.

## **10 - INDUSTRIAL INTERNSHIP PROGRAMME – MAJOR PROJECT**

A requirement of this program is to complete a period of internship which requires 30 days on the job training during which the students are expected to practice in the workplace those skills they acquired at class, thus gaining valuable ‘hands on’ experience and exposure to the real nature and environment of the ‘world of work’.

The main objectives of **INTERNSHIP** are to:

1. Broaden the student’s awareness of workplace practice.
2. Provide the student with relevant practical experience.
3. Establish and maintain contacts between INSTITUTE and people in key positions in the private and public sectors.
4. Maintain strong links with employers.
5. Monitor employers’ requirements and adjust services and programs accordingly.
6. Promote INSTITUTE services and activities with industry.
7. Satisfy awarding body requirements.

### **STUDENT ASSESSMENT**

Assessment integrity is maintained by a commitment to the following principles:

1. Assessment of competence is based on performance criteria
3. Continuous assessment is conducted in both education and work environments.
4. Assessment is conducted by qualified assessors.
5. All assessments are sample-checked by qualified internal verifiers to confirm that they meet the assessment criteria, in particular validity, consistency and objectivity.
6. Feedback from students provides a basis for the evolving learning and assessment strategies.

### **PROGRAMME EVALUATION -**

It is the practice at INSTITUTE to have its program evaluated by both students and employers. Results of these program evaluations, which are rated by professional external evaluators, show consistently high levels of satisfaction. Institute is firmly client-oriented. Programs are developed to meet the needs of clients, particularly the employers and students. This approach has enabled to develop high quality education program to meet the needs of a variety of clients from a wide range of organizations.

## **PROJECT WORK PHASE**

### **COURSE OBJECTIVE**

A requirement of this program is to complete the project work where the students are expected to write reports in their chosen field of interest within the various verticals of the Chartering and Ship Broking industry which will enable the student to gain more in depth knowledge of the chosen vertical.

The completed report which shall be done under the guidance of the respective project guides and shall include the current business practices and also suggest improvements to the existing processes.