

CURRICULUM

FOR THE TRADE OF

Mooring Operations Executive

UNDER

APPRENTICESHIP TRAINING SCHEME



सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

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1. ACKNOWLEDGEMENT

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1. AE MTC , Mumbai
2. AMTOI
3. FFFAI
4. CAI
5. CFSAI
6. CSLA

2. BACKGROUND

2.1 Apprenticeship Training Scheme under Apprentice Act 1961

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate (ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are five categories of apprentices namely; **trade apprentice, optional trade apprentice, graduate, technician and technician (vocational) apprentices.**

Qualifications and period of apprenticeship training of trade apprentices and optional trade apprentices vary from trade to trade. The apprenticeship training consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

2.2 Changes in Industrial Scenario

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The

number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

2.3 Reformation

The Apprentices Act, 1961 has been amended and brought into effect from 22nd December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

- Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.
- Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.
- Scope has been extended also to non-engineering occupations.
- Establishments have been permitted to outsource basic training in an institute of their choice.
- The burden of compliance on industry has been reduced significantly.

3. RATIONALE

The mooring and un mooring of vessels is a potentially hazardous operation. It is also an operation, which demands high degree of team work. To be both efficient and safe, all involved must be properly trained and equipped , and must have a clear understanding of the contribution made by others, as well as their own role and responsibilities. On successful completion of this course, candidate will learn & practise the established good procedures for the safe and efficient mooring and un mooring of ships.

4. JOB ROLE

Brief description of Job role:

A mooring executive will be appointed by the port for safe mooring and unmooring operation of ships at terminals including offshore terminals and buoy moorings. Their job responsibilities include the following:

- Supervision of mooring & unmooring operations.
- Coordinate mooring gangs ashore.
- Communicate with pilot and ship's officers for smooth berthing & un berthing operations.
- Briefing shore mooring gang about the mooring plan and sequence of operation.
- Ensure mooring operations are completed as per agreed plan
- Ensuring correct positioning of the vessel
- Inspection & maintenance of mooring equipments ashore. Report damages , if any, after inspection
- Ensure safety of all shore personnel involved in mooring operations.
- Ensure compliance with port & terminal requirements during mooring

5. LEARNING OUTCOMES

A. GENERIC OUTCOME

- ❖ Describe the purpose of mooring
- ❖ Explain established procedures to be followed during mooring operations
- ❖ Recognize & comply with safe working practices in mooring
- ❖ Understand the importance of proper communication and coordination between various teams during mooring
- ❖ Explain the common causes of accidents during mooring operation
- ❖ Understand the importance of personal safety
- ❖ Work in a team, understand and practice soft skills, technical English to communicate with required clarity.
- ❖ Apply the general concept of basic computer, basic operating system and uses of internet services to take benefit of IT developments in the industry

B. SPECIFIC OUTCOME

- ❖ Have an understanding of the need for & purpose of mooring.
- ❖ Understand the role of the mooring executive and mooring gangs.
- ❖ Explain the properties of various types of mooring ropes & wires
- ❖ Discuss the use of various equipments used in mooring
- ❖ Describe the role of pilots, ship staff and tug boats
- ❖ Explain the general lay out of jetties&the general configuration of lines used in mooring
- ❖ Understand & carryout the preparation requirements for safe mooring operations.
- ❖ Know the risks involved in mooring operations and common causes of accidents
- ❖ Know the requirements of personal safety.
- ❖ Understand & explain the importance and use of proper PPE
- ❖ Understand and explain the common terms used in mooring operations
- ❖ Able to understand the meaning of hand signals used in mooring operations.

- ❖ Explain how to conduct pre mooring meeting & briefing of the mooring team ashore.
- ❖ Able to communicate in VHF radios and understand the instructions given by pilot & ship staff.
- ❖ Explain how to handle the lines safely & efficiently.
- ❖ Describe how mooring boats are used in mooring operations
- ❖ Understand and describe the correct procedures for making fast the lines and laying on bits, bollards, hooks or similar arrangements used.
- ❖ Explain the various procedures for letting lines go during un mooring and safety precautions to be taken
- ❖ Understand snap back zones
- ❖ Understand operations at buoy moorings.

6. GENERAL INFORMATION

1. Name of the Trade : **Mooring Operations Executive**

2. Duration of Apprenticeship Training : **15 Months**
 - (i) Basic Training : 03 Months
 - (ii) Practical Training : 12 Months

4. Entry Qualification : Passed 12th class examination under 10+2 system of education or its equivalent.

5. Selection of Apprentices : The apprentices will be selected as per the Apprentices Act amended time to time

6. Rebate : Trainee pass-outs from PMKVY or MES-SDI or Any central Government/state government approved scheme in course/trade/module relevant to the proposed optional trade.

Note: Industry may impart training as per above time schedule, however this is not fixed. The industry may adjust the duration of training considering the fact that all the components under the syllabus must be covered. However the flexibility should be given keeping in view that no safety aspect is compromised and duration of industry training to be remains as 1 year.

7. COURSE STRUCTURE

Training duration details: -

Time (in months)	1-3	4-15
Basic Training	Block– I	-----
Practical Training (On - job training)	----	Block – II

Components of Training	Duration of Training in Months														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Basic Training Block - I															
Practical Training Block - II															

8. SYLLABUS

8.1 BASIC TRAINING (BLOCK – I)

GENERAL INFORMATION

1. Name of the Trade : **Mooring Operations Executive**

2. Duration of Basic training : 03 months/500 hours
Breakup of Basic Training
 - 1) Theory and Practical : 390 Hrs
 - 2) Employability skills : 110 hrs.

3. Batch size : 20

4. Power Norms : 4 KW

5. Space Norms : 25 Sq. m

6. Instructor Qualification:
 - i) Certificate of competency as Master issued or recognized by Government of India

or

 - ii) Berth operators or linesman with at least 5 years' experience in mooring operations

7. Tools, Equipment's & Machinery required : - As per Annexure – I

BASIC TRAINING (BLOCK – I)

Trade: Document Executive (Customs Clearance)

8.1.1 DETAIL SYLLABUS OF PROFESSIONAL SKILLS & PROFESSIONAL KNOWLEDGE

Sl. No.	Professional Skills (Trade Practical) - 270 hrs	Professional Knowledge (Trade Theory) - 120 hrs
1.	<p>Safety Understanding of the Safety rules and Procedures and taking precautions in the workplace.</p>	<p>Safety The safety rules and Procedures to be observed by Mooring Operations Executive.</p>
2.	<p>Selection and use different safety equipment's. Use PPE</p>	<p>Different safety equipment's. Use of PPE</p>
3.	<p>Safety during mooring Follow Personal safety, Identify risks and hazards associated with mooring operations, Snap back zones, Bights and Dangers with mixed mooring and take precautions. Follow Procedures in case of emergencies.</p>	<p>Safety during mooring Personal safety, Use of PPE. Risks and hazards associated with mooring operations. Snap back zones, Bights and Dangers with mixed mooring. Procedures to be followed in case of emergencies.</p>
4.	<p>Introduction to Shipping Make a visit to jetties and ships. collect Information on terminals and identify the Role played by ship Masters, Pilots and terminal personnel.</p>	<p>Introduction to Shipping General introduction to shipping Information on terminals Role of ship Masters, Pilots and terminal personnel</p>

<p>5.</p>	<p>General Principles of Mooring Operations</p> <p>Understanding the purpose of moorings.</p> <p>Visit jetties and identify mooring lines & equipments</p> <p>Decide the mooring pattern</p> <p>.</p>	<p>General Principles of Mooring Operations</p> <p>Purpose of moorings</p> <p>Forces acting on ships at a berth</p> <p>General layout of a berth with mooring equipments</p> <p>Introduction to mooring line configuration – head lines & stern lines , breast lines & spring lines</p> <p>Factors to be considered prior deciding the mooring pattern.</p>
<p>6.</p>	<p>Duties and Responsibilities</p> <p>Participate in mooring operations under supervision. understand the job roles of various teams involved and follow.</p>	<p>Duties and Responsibilities</p> <ul style="list-style-type: none"> • Teams involved in a mooring operation – Ship staff, shore mooring gang, pilot & tug boat • Duties and responsibilities of Ship's Master & Pilot • Role & responsibilities of mooring executive • Role of tug boats
<p>7.</p>	<p>Mooring equipments and their use</p> <p>Familiarize with equipments used in mooring operations and use them</p>	<p>Mooring equipments and their use</p> <p>Introduction to various equipments used in mooring operations</p> <p>Characteristics of different types of mooring lines – synthetic fibre ropes & wires- their properties</p>

		<p>Heaving line and messenger lines & their uses</p> <p>Winches on the jetty for heaving messenger lines</p> <p>Use of bollards, Bits , Quick release hooks</p> <p>Auto release systems</p> <p>Capstans and VHF radios</p> <p>Mooring boats & associated equipments, Slip ropes and Rope tails</p>
8.	<p>Preparation for Mooring</p> <p>Liaise with vessel & pilot, receive mooring plan, carry out pre mooring inspections using check lists</p>	<p>Preparation for Mooring</p> <p>Use of pre operational check lists</p> <p>Agreement on mooring plan with the vessel</p> <p>Understand correct position of the vessel alongside jetty</p> <p>Inspection of all mooring equipments ashore</p> <p>Briefing of the mooring gangs</p> <p>Communication equipments – testing and use</p> <p>Checking mooring area on jetty for any hazards</p>

9.	<p>Mooring Operations</p> <p>Communicate with the vessel</p> <p>Take Precautions with heaving and messenger lines</p> <p>Operate mooring boats</p> <p>Correct procedures for handling lines</p> <p>lay on bollards, bits & hooks. Follow Sequence</p> <p>Casting off procedures</p> <p>Carry out buoy moorings . Follow Operational procedures</p> <p>Use Common hand signals</p> <p>Perform mooring and un mooring operations.</p>	<p>Mooring Operations</p> <p>Communication with the vessel</p> <p>Precautions with heaving and messenger lines</p> <p>Operation of mooring boats</p> <p>Correct procedures for handling lines</p> <p>Sequence of taking lines from ship & procedures for laying on bollards, bits & hooks</p> <p>Casting off procedures</p> <p>Operational procedures for buoy moorings</p> <p>Common hand signals and their meaning</p>
10.	<p>Revision & Internal Assessment</p>	

BASIC TRAINING (BLOCK – I)

8.1.2 EMPLOYABILITY SKILLS

GENERAL INFORMATION

- 1 Name of the Trade : **Mooring Operations Executive**
- 2 Name of the subject : **Employability Skills**
- 3 Applicability : **ATS- Mandatory for fresher only**
- 4 Hours of Instruction : **110 Hrs.**

5Instructor Qualification:

- i) **MBA/BBA with two years' experience or graduate in sociology/social welfare/Economics with two years' experience and trained in Employability skills from DGT Institute.**

And

Must have studied in English/Communication Skill and Basic Computer at 12th / diploma level

OR

- ii) **Existing Social Study Instructor duly trained in Employability Skills from DGT Institute.**

BASIC TRAINING (BLOCK – I)

8.1.2.1 DETAIL SYLLABUS OF EMPLOYABILITY SKILLS

Topic No.	Topic	Duration (in hours)
	English Literacy	15
1	Pronunciation : Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)	
2	Functional Grammar Transformation of sentences, Voice change, Change of tense, Spellings.	
3	Reading Reading and understanding simple sentences about self, work and environment	
4	Writing Construction of simple sentences Writing simple English	
5	Speaking / Spoken English Speaking with preparation on self, on family, on friends/ classmates, on know, picture reading gain confidence through role-playing and discussions on current happening job description, asking about someone's job habitual actions. Cardinal (fundamental) numbers ordinal numbers. Taking messages, passing messages on and filling in message forms Greeting and introductions office hospitality, Resumes or curriculum vita essential parts, letters of application reference to previous communication.	
	I.T. Literacy	15
1	Basics of Computer Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer.	
2	Computer Operating System Basics of Operating System, WINDOWS, The user interface of Windows OS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc., Use of Common applications.	
3	Word processing and Worksheet Basic operating of Word Processing, Creating, opening and closing Documents, use of shortcuts, Creating and Editing of Text, Formatting	

	<p>the Text, Insertion & creation of Tables. Printing document.</p> <p>Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets</p>	
4.	<p>Computer Networking and INTERNET</p> <p>Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks),</p> <p>Meaning of World Wide Web (WWW), Web Browser, Web Site, Web page and Search Engines. Accessing the Internet using Web Browser, Downloading and Printing Web Pages, Opening an email account and use of email. Social media sites and its implication.</p> <p>Information Security and antivirus tools, Do's and Don'ts in Information Security, Awareness of IT - ACT, types of cyber-crimes.</p>	
	Communication Skill	25
1	<p>Introduction to Communication Skills</p> <p>Communication and its importance</p> <p>Principles of Effective communication</p> <p>Types of communication - verbal, non-verbal, written, email, talking on phone.</p> <p>Nonverbal communication -characteristics, components-Para-language</p> <p>Body - language</p> <p>Barriers to communication and dealing with barriers.</p> <p>Handling nervousness/ discomfort.</p> <p>Case study/Exercise</p>	
2	<p>Listening Skills</p> <p>Listening-hearing and listening, effective listening, barriers to effective listening guidelines for effective listening.</p> <p>Triple- A Listening - Attitude, Attention & Adjustment.</p> <p>Active Listening Skills.</p>	
3	<p>Motivational Training</p> <p>Characteristics Essential to Achieving Success</p> <p>The Power of Positive Attitude</p> <p>Self-awareness</p> <p>Importance of Commitment</p> <p>Ethics and Values</p> <p>Ways to Motivate Oneself</p> <p>Personal Goal setting and Employability Planning.</p> <p>Case study/Exercise</p>	

4	Facing Interviews Manners, Etiquettes, Dress code for an interview Do's & Don'ts for an interview	
5	Behavioral Skills Organizational Behavior Problem Solving Confidence Building Attitude Decision making Case study/Exercise	
	Entrepreneurship skill	15
1	Concept of Entrepreneurship Entrepreneurship- Entrepreneurship - Enterprises:-Conceptual issue Entrepreneurship vs. Management, Entrepreneurial motivation. Performance & Record, Role & Function of entrepreneurs in relation to the enterprise & relation to the economy, Source of business ideas, Entrepreneurial opportunities, The process of setting up a business.	
2	Project Preparation & Marketing analysis Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept & application of Product Life Cycle (PLC), Sales & distribution Management. Different Between Small Scale & Large Scale Business, Market Survey, Method of marketing, Publicity and advertisement, Marketing Mix.	
3	Institutions Support Preparation of Project. Role of Various Schemes and Institutes for self- employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to familiarizes with the Policies /Programs& procedure & the available scheme.	
4	Investment Procurement Project formation, Feasibility, Legal formalities i.e., Shop Act, Estimation & Costing, Investment procedure - Loan procurement - Banking Processes.	
	Productivity	10
1	Productivity Definition, Necessity, Meaning of GDP.	
2	Affecting Factors Skills, Working Aids, Automation, Environment, Motivation How improves or slows down.	
3	Comparison with developed countries Comparative productivity in developed countries (viz. Germany, Japan	

	and Australia) in selected industries e.g. Manufacturing, Steel, Mining, Construction etc. Living standards of those countries, wages.	
4	Personal Finance Management Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance.	
	Occupational Safety, Health & Environment Education	15
1	Safety & Health Introduction to Occupational Safety and Health importance of safety and health at workplace.	
2	Occupational Hazards Basic Hazards, Chemical Hazards, Vibro-acoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention.	
3	Accident & safety Basic principles for protective equipment. Accident Prevention techniques - control of accidents and safety measures.	
4	First Aid Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person	
5	Basic Provisions Idea of basic provision of safety, health, welfare under legislation of India.	
6	Ecosystem Introduction to Environment. Relationship between Society and Environment, Ecosystem and Factors causing imbalance.	
7	Pollution Pollution and pollutants including liquid, gaseous, solid and hazardous waste.	
8	Energy Conservation Conservation of Energy, re-use and recycle.	
9	Global warming Global warming, climate change and Ozone layer depletion.	
10	Ground Water Hydrological cycle, ground and surface water, Conservation and Harvesting of water	
11	Environment Right attitude towards environment, Maintenance of in -house environment	

	Labour Welfare Legislation	5
1	Welfare Acts Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund Act, The Workmen's compensation Act.	
	Quality Tools	10
1	Quality Consciousness : Meaning of quality, Quality Characteristic	
2	Quality Circles : Definition, Advantage of small group activity, objectives of quality Circle, Roles and function of Quality Circles in Organization, Operation of Quality circle. Approaches to starting Quality Circles, Steps for continuation Quality Circles.	
3	Quality Management System : Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.	
4	House Keeping : Purpose of Housekeeping, Practice of good Housekeeping.	
5	Quality Tools Basic quality tools with a few examples	

8.2 PRACTICAL TRAINING (ON-JOB TRAINING)

GENERAL INFORMATION

- 1 Name of the Trade : **Mooring Operations Executive**
2. Duration of On-Job Training : 12 months
3. Instructor Qualification : Linesman or berth operator with at least 5 years experience in mooring operations at jettis
- 4 Infrastructure for On-Job Training: As per Annexure – II

8.2.1 BROAD SKILL COMPONENT TO BE COVERED DURING ON-JOB TRAINING

(Detail Syllabus for Practical Training / ON - JOB TRAINING)

Duration: (12 months)

- ❖ Familiarization with the shipping industry.
- ❖ Health, Safety & Environment: Introduction to safety Equipments and their uses. Use of Personal protective Equipments (PPE).
- ❖ Develop good appearance and behavior, practice, tasks as per industry standard and express good communication skill.
- ❖ Explain the purpose & importance of mooring.
- ❖ Familiarise with various types of mooring lines – synthetic fibre ropes, wire ropes..etc
- ❖ Familiarise with various mooring equipments on jetty and operate the same
- ❖ Board vessels and understand the operations during mooring
- ❖ Work with mooring boat crew to take mooring lines from ship
- ❖ Learn to identify damaged mooring lines sent from vessels and when to reject such lines
- ❖ Learn & practice common hand signals
- ❖ Carry out inspection using pre mooring check list
- ❖ Learn the use of heaving lines & messenger lines and practice picking up mooring lines using the same. Understand the precautions to be taken when heaving lines are thrown from ship
- ❖ Participate in mooring operations , learn correct sequence of taking lines from vessel & safe procedures for handling of lines .
- ❖ Learn the positioning of ships alongside jetties
- ❖ Practise how to lay mooring lines on bollards, bits & hooks
- ❖ Participate in un mooring operations, learn how to let go lines safely
- ❖ Learn the use working of auto release hooks
- ❖ Understand the practice the use of slip ropes
- ❖ Participate in mooring operations at buoy moorings. Understand the mooring operations of tanker at SBM
- ❖ Carry out routine inspection & maintenance of mooring equipments on jetties.

9. ASSESSMENT STANDARD

9.1 Assessment Guideline:

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration to be given while assessing for team work, avoidance/reduction of scrape/wastage and disposal of scarp/wastage as per procedure, behavioral attitude and regularity in training.

The following marking pattern to be adopted while assessing:

a) Weightage in the range of 60-75% to be allotted during assessment under following performance level:

For this grade, the candidate with occasional guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of an acceptable standard of craftsmanship.

In this work there is evidence of:

- Good skill levels in the use of hand tools, machine tools and workshop equipment
- Many tolerances while undertaking different work are in line with those demanded by the component/job.
- A fairly good level of neatness and consistency in the finish
- Occasional support in completing the project/job.

b) Weightage in the range of above 75%- 90% to be allotted during assessment under following performance level:

For this grade, the candidate, with little guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of a reasonable standard of craftsmanship.

In this work there is evidence of:

- good skill levels in the use of hand tools, machine tools and workshop equipment
- The majority of tolerances while undertaking different work are in line with those demanded by the component/job.
- a good level of neatness and consistency in the finish
- little support in completing the project/job

- c) Weightage in the range of above 90% to be allotted during assessment under following performance level:

For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.

In this work there is evidence of:

- High skill levels in the use of hand tools, machine tools and workshop equipment
- Tolerances while undertaking different work being substantially in line with those demanded by the component/job.
- A high level of neatness and consistency in the finish.
- Minimal or no support in completing the project

10.FURTHER LEARNING PATHWAYS

After gaining adequate work experience in mooring operations, candidates may opt for training to advance his career into the following fields

1. Berth operators

ANNEXURE – I

TOOLS & EQUIPMENTS FOR BASIC TRAINING

INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL

KNOWLEDGE

TRADE: MOORING OPERATIONS EXECUTIVE

APPRENTICES TOOL KIT:-

Sl. No.	Name of the items	Quantity (indicative)
1.	Safety Shoes/Boots	20 pairs
2.	Safety Helmet	20
3.	Gloves	20 pairs
4.	Boiler suits (High visibility clothing)	20
5.	Safety Goggles	20 pairs
6.	Life Jackets	20
7.	VHF Radios	20
8.	Mooring Safety Norms Handbook	20
10.	DO's and Don'ts Sheet	20

Note: *In case of basic training the BTP may hire the Material Handling Equipments if required except if the BTP is the manufacturer of the equipment. Tools, equipment and machinery available in the industry may be used for imparting basic training if the BTP is setup by the Industry*

INFRASTRUCTURE FOR ON-JOB TRAINING

TRADE: MOORING OPERATIONS EXECUTIVE

Actual training will depend on the existing facilities available in the establishments. However, the industry should ensure that the broad skills defined against On-Job Training part (i.e. 12 months) are imparted. In case of any shortfall, the concerned industry may impart the training in any other industry to cover up the short fall.

GUIDELINES FOR INSTRUCTORS AND PAPER SETTERS

1. Due care to be taken for proper & inclusive delivery among the batch. Some of the following method of delivery may be adopted:
 - A) LECTURE
 - B) LESSON
 - C) DEMONSTRATION
 - D) PRACTICE
 - E) GROUP DISCUSSION
 - F) DISCUSSION WITH PEER GROUP
 - G) PROJECT WORK
 - H) INDUSTRIAL VISIT

2. Maximum utilization of latest form of training viz., audio visual aids, integration of IT, etc. may be adopted.

3. The total hours to be devoted against each topic may be decided with due diligence to safety & with prioritizing transfer of required skills.

ANNEXURE - IV

List of Basic Training providers recommended by LSC		
S.No	Name of Basic Training Providers	Location
1	Allcargo Logistics Limited	Tamil Nadu/Maharashtra
2	Alliance Institute of Advanced Pharmaceutical and Health Sciences	Telangana/Andhra Pradesh
3	Artem institute of logistics and transports	Tamil Nadu
4	Confederation of indian industry(CII) INSTITUTE OF LOGISTICS	PAN India
5	Daksya Academy Pvt Ltd	PAN India
6	Darcl Parable	Haryana
7	De Unique Educational Society (Softdot Institute)	PAN India
8	Degain Group	Maharashtra
9	Express Industry Council of India	PAN India
10	Green Earth Logistics Pvt. Ltd.	Tamil Nadu
11	INNOVISION LIMITED	PAN India
12	JBS Academy Pvt Ltd.	Gujarat
13	Nidan Technologies Private Limited	Maharashtra/Madhya Pradesh
14	People XL(Jobs connect hr solutions Pvt. Ltd)	South India
15	Premier Center for Competency Training	Tamil Nadu
16	Safeducate Learning Pvt. Ltd.	PAN India
17	Shri Technologies	PAN India
18	ST.BRITTO'S COLLEGE	Tamil Nadu
19	SynchroServe Global Solutions Private Limited	Telangana/Andhra Pradesh
20	Telangana Jagruthi	Telangana
21	TVS Training & Services Private Limited	Tamil Nadu
22	UPDATER SERVICES PVT LTD	South India

ANNEXURE - V

List of Assessment Agency for basic training recommended by LSC		
SL.NO	Name of Assessment Agency	Location
1	Hemsen EXIM LLP	PAN India
2	Eduworld Consultants Pvt. Ltd,	
3	CII (Confederation of Indian Industry)	
4	Induslynk Training Services Private Limited (Mettl)	
5	Manipal City & Guilds Pvt Ltd	
6	GreenArrows Safety Management (P) Ltd	
7	I-Vintage solutions Pvt. Ltd.	
8	CoCubes Technologies Pvt Ltd	
9	Samhit Assessments & research foundation	
10	Formac Software Services	
11	Unison Academy	
12	Prima Competencies Pvt. Ltd	
13	Brisk Mind Pvt Ltd	
14	Edu Vantage Pvt. Ltd.	
15	Lead Assessment	
16	C & K Management Limited	
17	Krish Networks	
18	Society for education and Environmental training	
19	D'Pariksha	
20	Anagha Solutions	
21	Ashvi Consulting	
22	Shri Guru Hargovind Society	