

CURRICULUM

FOR THE TRADE OF

In-plant Logistics Executive

(Supply Chain)

UNDER

APPRENTICESHIP TRAINING SCHEME



सत्यमेव जयते

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

CONTENTS

| Sl. No. | Topics | Page No. |
|---------|---|--|
| 1. | Acknowledgement | 3 |
| 2. | Background 2.1 Apprenticeship Training under Apprentice Act 1961 2.2 Changes in Industrial Scenario 2.3 Reformation | 4 |
| 3. | Rationale | 6 |
| 4. | Job roles | 8 |
| 5. | Learning Outcomes | 9 |
| 6. | General Information | 11 |
| 7. | Course Structure | 12 |
| 8. | Syllabus 8.1 Basic Training 8.1.1 Detail syllabus of Professional Skill & Professional Knowledge - Block – I 8.1.2 Detail Syllabus of Workshop science & Calculations 8.1.3 Detail Syllabus of Engineering Drawing 8.1.4 Employability Skill (General Information) 8.1.4.1 Syllabus of Employability skill - Block – I 8.2 Practical Training (On-Job Training) 8.2.1 Broad Skill Component to be covered during on-job training- Block – I | 13 14 19 21 22 26 27 |
| 9. | Assessment Standard and Assessment Guideline | 29 |
| 10. | Further Learning Pathways | 31 |
| | Annexure-I – Tools & Equipment for Basic Training | 32 |
| | Annexure-II – Tools & Equipment for On-Job Training | 33 |
| | Annexure-III - Guidelines for Instructors & Paper setter | 34 |
| | Annexure-IV - List of Basic Training providers recommended by LSC | 35 |
| | Annexure V - List of Assessment Agency for basic training recommended by LSC | 36 |

1. ACKNOWLEDGEMENT

Logistics Sector Skill Council (LSC) sincerely acknowledges with thanks the contribution and cooperation extended by the Industry, State Directorate, Trade Experts and all others to bring out this curriculum for the trade of **In-plant logistics executive(Supply chain)** under Apprenticeship Training Scheme.

Special acknowledgement is expended to the following industries/organizations who have contributed valuable inputs in bringing out this curriculum through their expert members:

1. TVS Logistics
2. Sattva Logistics
3. Transworld Logistics
4. Godrej
5. Mahindra Logistics

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

This candidate trained in this job role will be employed in the manufacturing setup or supply chain and product handling centers. The knowledge of various inventory and material handling equipment will be used to bring about effective and cost efficient transfer of materials within the plant or the shop floor. Each employee in logistics has a specific job. There are different job titles in each of the different types of logistic activities and each has the different importance:

1. The greater degree of relevance of the training with latest advancements of the industry will enhance the employability opportunities.
2. Goods should be secure till it reaches the end user.
3. Able to learn how to handle types of goods.
4. Acquire knowledge of safely handling and storing any good in a plant stockyard and ensure its safe movement on the shop floor.
5. Able to use the computer knowledge for electronic documentation of information and reporting.
6. Able to use the labeling and packaging instructions in detail on the primary packaging materials.
7. Schedule and Prioritize plans every day without any delays.
8. Able to provide suggestion for logistics which shall be improve productivity.
9. Able to understand the technical specifications and equipment details, that helps during product movement processes.
10. Exposure to regulations, use of work equipment, maintenance, control of substances hazardous to health with respect to Safety and Security aspects.
11. Exposure to Validate the relevant data obtained by cross-verification
12. Assess what is to be done to resolve the issue.

13. Ability to understand the additional information required and contact details of the relevant personal in the department.
14. Ability to manage expectations.
15. Able to communicate and behave in a professional manner when dealing with customers, colleagues and supervisors.
16. Knowledge of Risk and impact of not following defined procedures/work instructions.
17. Able to understand clearly and gaining extensive knowledge of the company, services offered and related solutions to problems.
18. Exposure to Reporting and documentation.
19. Ability to carry out basic organizational procedures in resolving the query and updating the unsolved query to suit requirements.
20. Ability to understand and maintain health, safety and security standards during delivery management.

4. JOB ROLE

Brief description of Job role:

In-plant **logistics** covers movements within the manufacturing plant of raw materials, components and sub-assemblies. These include storage of raw material and movement of raw material from stocking point to production line and movement of finished goods to stocking point, its storage and bringing finished products out to the factory gate. An In-plant logistics executive is responsible for:

- Coordinating for receipt of goods and their storage within the stock yard
- Movement of goods within the industry premise from procurement to stock and stock to production line and for movement of finished goods within plant
- Ensuring timely delivery of materials at the production line
- Maintaining records of inventory, receipt and despatches from the stock yard
- Providing daily and weekly reporting on the inventory to the superiors
- Developing daily and weekly schedule for inbound and outbound activities
- Ensuring the safety and security of materials within the stockyard
- Initiate and apply new methods to reduce logistics costs and improve the process flow

5. LEARNING OUTCOMES

A. GENERIC OUTCOME

- ❖ Recognize & comply safe working practices, environment regulation and housekeeping.
- ❖ Work in a team, understand and practice soft skills, technical English to communicate with required clarity.
- ❖ Illustrate concept and principles of basic arithmetic calculation, algebraic, trigonometric, statistics and apply knowledge of specific area to perform practical operations which requires well developed skills.
- ❖ Explain basic science in the field of study including basic electrical, and hydraulics & pneumatics.
- ❖ Read and apply engineering drawing for different application in the field of work.
- ❖ Explain the knowledge of general concept, principles of productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
- ❖ Explain the general concept and process of energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
- ❖ Explain and display sensitivity towards personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
- ❖ 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

- ❖ Understand different type of in-plant logistic activities
- ❖ Apply knowledge of different inventory models, storage handling equipment, computer based inventory counting tools to meet the job requirement and increase productivity
- ❖ Apply knowledge of safety rules and procedures in an industrial environment.
- ❖ Apply computer knowledge for electronic documentation of information and reporting.
- ❖ Carryout activities based on daily receipt and dispatch instructions received.
- ❖ Develop schedules and prioritize activities so as to plan every day without any delays.
- ❖ Understand the technical specification of various handling equipment, which helps during movement processes.
- ❖ Exposure to regulations, use of work equipment, maintenance, control of substances hazardous to health with respect to Safety and Security aspects.
- ❖ Plan and organize assigned work. Further assign work to different associated levels so as to achieve results
- ❖ Detect & resolve issues during execution demonstrate possible solutions and agree tasks within the team.
- ❖ Communicate with required clarity.

6. GENERAL INFORMATION

1. Name of the Trade : **In-plant Logistics Executive
(Supply chain)**

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

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

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

5. 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)

DURATION: 03 MONTHS

GENERAL INFORMATION

1. Name of the Trade : **In-plant Logistics Executive
(Supply chain)**
2. Duration of Basic training : 03 months/500 hours
Breakup of Basic Training
 - a) Theory and Practical : 390 Hrs
 - b) Employability skills : 55 hrs.
 - c) Engg. Drawing : 35 hrs.
 - d) W/Shop Cal. and Science : 20 hrs.
3. Batch size : 20
4. Power Norms : 4 KW
5. Space Norms : 25 Sq. m
6. Instructor Qualification : Degree/Diploma in Engineering or Masters Degree from recognized university/Board with one/two-year post qualification experience respectively in relevant field.
7. Tools, Equipment's & Machinery required : - As per Annexure – I

BASIC TRAINING (BLOCK – I)

Trade: In-plant Logistics Executive

(Supply chain)

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 & Precaution Explain different type of dangerous goods and associated risks and ways of handling</p> <p>Follow the Safety rules and Procedure</p> <p>Apply SOP and the handling procedure in case of miss-happenings</p> <p>Follow Company safety policy inside the company premises.</p> <p>Understand the consequences of wrong usage of PPE and use PPE properly. Follow OSHA.</p> <p>Implement 5S .</p> <p>Maintain Health, Safety and Security measures for carried out during operations Handle food items with Precautions</p> | <p>Safety & Precaution Different type of dangerous goods and associated risks and ways of handling</p> <p>Safety rules and Procedures SOP and the handling procedure in case of miss-happenings</p> <p>Company safety policy inside the company premises</p> <p>Importance of Proper usage of PPE and consequences of wrong usage Details OSHA and its application</p> <p>5S and its implementation and practice</p> <p>Maintain Health, Safety and Security measures for carried out during operations</p> <p>Precautions to be taken while handling food items</p> |
| 2. | <p>Body Positions</p> <p>Demonstrate right body position for different activities</p> <p>Use different body postures for different activities keeping in view their benefits and hazards</p> | <p>Body Positions</p> <p>Physical requirements for performing functions (Body Positions)</p> <p>Different body postures for different activities their benefits and hazards</p> |

| | | |
|----|--|--|
| 3. | <p>Basics of supply chain logistics logistic –</p> <p>Watch Video of logistics activities in an industrial setup providing practical information of different logistic activities and follow.</p> <p>Understand key concepts of Logistics in a manufacturing setup and supply chain logistics</p> <p>Perform key activities -inbound, Inplant and outbound.</p> | <p>Basics of supply chain logistics logistic –</p> <ul style="list-style-type: none"> • Introduction to Logistics in a manufacturing setup • Different activities being conducted – Inbound, in-plant and outbound • Types of roles and associated responsibility |
| 4. | <p>Various activities in in-plant logistics</p> <p>Carry out activities in in-plant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities)</p> <p>Coordinate with assembly line for their requirement and in time</p> <p>Watch video showing the activities coupled with learning group activities</p> | <p>Various activities in in-plant logistics</p> <p>Basic activities in in-plant logistics</p> <p>Explain Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities</p> <p>Explain the process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner</p> <p>video showing the activities coupled with learning group activities</p> |
| 5. | <p>Basic of inventory & stores management</p> <p>Carry out Introduction to different types of inventory management – FIFO, LIFO, etc.</p> <p>Practical applications of inventory management (Through video files)</p> <p>Perform Receiving and storage processes (Through team activities)</p> | <p>Basic of inventory & stores management</p> <p>Elaborate receiving and storage processes.</p> <p>Basics of allocation of Goods storage location</p> <p>Introduction to different types of inventory management – FIFO, LIFO, etc.</p> <p>Basic advantages, benefits, challenges</p> |

| | | |
|----|--|--|
| | <p>Perform allocation of Goods storage location (Through team activities)</p> <p>Follow Do's and Don'ts during Inventory counting and good practices associated with inventory management and handling.</p> | <p>associated with inventory models and suitability to different manufacturing setups</p> <p>Keeping the inventory count and records under various methods.</p> <p>Changing inventory levels</p> <p>Explain Cross verification of Inventory</p> <p>Do's and Don'ts during Inventory counting</p> <p>Explaining various good practices associated with inventory management and handling and their benefits</p> |
| 6. | <p>Use of Technology and equipment in in-plant logistics</p> <p>Use of computer based scanners, RFID scanners, other associated software</p> <p>Use communication Devices to track and count inventory</p> <p>Select MHEs like forklift, etc., based on their capacity, their usage, their technical limitations, and suitability of use for different activities.</p> <p>Watch Video demonstrating use of MHEs in different in-plant setups, their technical and practical limitations, etc.</p> | <p>Use of Technology and equipment in in-plant logistics</p> <p>Knowledge on Computer and Associated software</p> <p>Communication Devices used in warehouse environment to track and count inventory</p> <p>Knowledge on Scanning equipment including Bar Scanner and RFID used</p> <p>Explain various MHEs like forklift, etc., their capacity, their usage, their technical limitations, suitability of use for different activities</p> |

| | | |
|----|---|---|
| 7. | <p>Inbound process Identify and classify raw materials / goods into different types.</p> <p>select the right equipment for different scenarios and products</p> <p>Read and fill different types of forms and reports.</p> <p>Read the requirement of the manufacturing line and maintain the required inventory of different items. Co-ordinate with vendors of timely supply of appropriate quantities of items based on usage norms and requirement of manufacturing setup.</p> <p>Perform verifications of goods at the time of receipt of goods.</p> <p>Use basic formats and reports associated with receipt of goods</p> <p>Update counts</p> <p>Plan and schedule deliveries as per requirement</p> <p>Follow various best practices associated with handling in-plant logistics</p> <p>Visit a site of an industrial setup showing inbound process management and follow.</p> | <p>Inbound process Explain different types of raw materials and intermediary goods that can be procured and stored</p> <p>Explain various WIP and finished goods that can be stored</p> <p>Explain how to read the requirement of the manufacturing line and maintaining the required inventory of different items</p> <p>Co-coordinating with vendors of timely supply of appropriate quantities of items based on usage norms and requirement of manufacturing setup</p> <p>Explaining the various verifications to be undertaken at the time of receipt of goods</p> <p>Explaining the basic formats and reporting associated with receipt of goods</p> <p>Updating counts</p> <p>Planning and scheduling deliveries as per requirement</p> <p>Explain various best practices associated with handling in-plant logistics</p> |
| 8. | <p>Out-bound process Read and verify dispatch orders and collect acknowledgment and delivery reports</p> <p>Select the right equipment for different scenarios and products</p> <p>Make a visit to industrial setup showing outbound process management and follow the process</p> | <p>Out-bound process Explain different dispatch orders and associated signing authorities</p> <p>Explain how to read requirement instructions coming from manufacturing setup</p> <p>Explain process of identifying the item and the required carrier.</p> <p>Explain scheduling delivery so that there</p> |

| | | |
|----|---|---|
| | <p>Read requirement instructions coming from manufacturing setup</p> <p>Follow the process Identify the item and the required carrier.</p> <p>schedule delivery so that there is no delay and the carrier resource is utilized in the most efficient manner.</p> <p>Carry out dispatch activities and generate dispatch record, verify number and type of product, collect acknowledgement of dispatch.</p> <p>Co-ordinate with manufacturing and delivery team to ensure delivery and collect delivery reports.</p> <p>Follow various good practices associated with product handling and their benefits</p> | <p>is no delay and the carrier resource is utilized in the most efficient manner</p> <p>Explain activities to be conducted in dispatch - generate dispatch record, verify number and type of product, collect acknowledgement of dispatch</p> <p>Explain how to co-ordinate with manufacturing and delivery team to ensure delivery and collect delivery reports</p> <p>Explaining various good practices associated with product handling and their benefits</p> |
| 9. | <p>Reporting Prepare reports related to inventory change, dispatches, delivery success, inbound receipts, etc.</p> <p>Use MIS systems for reporting use Microsoft excel and office.</p> <p>Follow various good practices associated with reporting activities and their benefits.</p> <p>Watch video of MIS systems generating reports</p> | <p>Reporting Explain different types of reports related to inventory change, dispatches, delivery success, inbound receipts, etc.</p> <p>Explain different types of MIS systems that are commonly used for reporting</p> <p>Explain making and updating reports in MIS ad or Microsoft excel and office.</p> <p>Explaining various good practices associated with reporting activities and their benefits.</p> |
| 11 | <p>Revision & Internal assessment</p> | |

8.1.2.1 SYLLABUS FOR WORKSHOP SCIENCE & CALCULATION

Duration – 20 Hrs

| | | |
|----------------------------------|---|---|
| Unit | : | Systems of unitFPS, CGS, MKS/SI unit, unit of length,Mass and time, Conversion of units |
| Basic Mathematics | : | BODMAS rule Fraction-Addition, Subtraction, multiplication and Division-Problem solving, Decimal Addition. Simple calculation using Scientific Calculator.Conversion of Fraction to Decimal and vice versa |
| Percentage | : | Introduction, Simple calculation. Changing percentagetofraction and decimal & vice-versa |
| Material Science | : | Definition, properties (physical & mechanical) and uses of Metal, Non-metal, Alloy &Insulator. Types of ferrous and Non-ferrous metals. Difference between Ferrous and Nonferrous metals. |
| Mass, Weight and Density: | | Mass, Unit of Mass, Weight, difference between mass and weight. Density, unit of density. Relation between mass, weight & density. Simple problems related to mass, weight, and density. |
| Menstruation | : | Area and perimeter of square, rectangle, parallelogram, triangle, 13 circle, semi-circle, Volume of solids – cube, cuboid, cylinder and Sphere. Surface area of solids – cube, cuboid, cylinder and Sphere |
| Elasticity | : | Elastic & Plastic material. Stress & strain and their units. Young’s modules. Ultimate stress and breaking stress. |
| Heat & Temperature | : | Heat and temperature, their units, difference betweenheat and temperature, boiling point, melting point, Scale of temperature, relation between different scale of temperature. Thermometer, pyrometer. Transmissionof heat, conduction, convection, radiation. |
| Basic Electricity | : | Introduction and use of Electricity. AC, DC &their comparisons. Current, Voltage, Resistance&their Units. Power, Energy & their units. Insulator and conductors & their uses. |

8.1.3 SYLABUS FOR ENGINEERING DRAWING

Duration: 35 Hours

Introduction to Engineering Drawing and Drawing Instruments: - Conventions - Viewing of engineering drawing sheets. - Method of Folding of printed Drawing Sheet as per BIS SP:46- 2003 - Drawing board, T-Square, Drafter (Drafting M/c), Set Squares, Protractor, Drawing Instrument Box (Compass, Dividers, Scale, Diagonal Scales etc.), Pencils of different Grades, Drawing pins / Clips.

Lines: - Definition, types and applications in Drawing as per BIS SP: 46-2003 - Classification of lines (Hidden, center, construction, Extension, Dimension, Section) - Drawing lines of given length (Straight, curved) - Drawing of parallel lines, perpendicular line - Methods of Division of line segment

Free hand drawing of - Lines, polygons, ellipse, etc. - geometrical figures and blocks 12 with dimension Transferring measurement from the given object to the free hand sketches.

Drawing of Geometrical Figures: Definition, nomenclature and practice of - Angle: Measurement and its types, method of bisecting. - Triangle -different types - Rectangle, Square, Rhombus, Parallelogram. - Circle and its elements.

Sizes and Layout of DrawingSheets - Selection of sizes - Title Block, its position and content - Item Reference on Drawing Sheet (Item List)
Method of presentation of Engineering Drawing - Pictorial View - Orthographic View - Isometric view

Drawing of Solid figures (Cube, Cuboids, Cone) with dimensions.

Free hand Drawing of Solid figures (Prism, Pyramid, Frustum of Cone and Pyramid.) with dimensions.

Free Hand sketch of hand tools and measuring tools used in respective trades.

Projections: - Concept of axes plane and quadrant. - Orthographic projections - Method of first angle and third angle projections (definition and difference) - Symbol of 1st angle and 3rd angle projection as per IS specification. Drawing of Orthographic projection in 3rd angle.

BASIC TRAINING (BLOCK – I)
8.1.2 EMPLOYABILITY SKILLS

GENERAL INFORMATION

1. Name of the Trade : **In-plant Logistics Executive
(Supply Chain)**
2. Name of the subject : **Employability Skills**
3. Applicability : **ATS - Mandatory for fresher only**
4. Hours of Instruction : **55 Hrs.**
5. Instructor 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 | |
| 1 | Reading Reading and understanding simple sentences about self, work and environment | 8 |
| 2 | Writing Construction of simple sentences Writing simple English | |
| 3 | Speaking / Spoken English Speaking with preparation on self, on family, on friends/ classmates, on known, 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 | |
| 1 | Basics of Computer Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer. | 10 |
| 2 | Word processing and Worksheet Basic operating of Word Processing, Creating, opening and closing Documents, use of shortcuts, Creating and Editing of Text, Formatting the Text, Insertion & creation of Tables. Printing document. Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets, Use of External memory like pen drive, CD, DVD etc., Use of Common applications. | |

| | | |
|---|---|----------|
| 3 | Computer Networking and INTERNET Computer Networking and INTERNET - 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 | |
| | Communication Skill | |
| 1 | Introduction to Communication Skills Communication and its importance Principles of Effective communication Types of communication - verbal, nonverbal, written, email, talking on phone. Nonverbal communication -characteristics, components-Para-language Body - language Barriers to communication and dealing with barriers. Handling nervousness/ discomfort. | |
| 2 | Listening Skills Listening-hearing and listening, effective listening, barriers to effective listening guidelines for effective listening. Triple- A Listening - Attitude, Attention & Adjustment. Active Listening Skills. | |
| 3 | Motivational Training Characteristics Essential to Achieving Success The Power of Positive Attitude Self-awareness Importance of Commitment Ethics and Values Ways to Motivate Oneself Personal Goal setting and Employability Planning. | 8 |
| 4 | Facing Interviews Manners, Etiquettes, Dress code for an interview Do's & Don'ts for an interview | |
| 5 | Behavioral Skills Problem Solving Confidence Building Attitude | |

| | | |
|---|--|-----------|
| | Entrepreneurship skill | |
| 1 | Concept of Entrepreneurship Entrepreneurship - Enterprises: -Conceptual issue Source of business ideas, Entrepreneurial opportunities, the process of setting up a business. | 08 |
| 2 | 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 /Programmes & procedure & the available scheme. | |
| | Productivity | |
| 1 | Productivity Definition, Necessity, Meaning of GDP. | 06 |
| 2 | Affecting Factors Skills, Working Aids, Automation, Environment, Motivation How improves or slows down. | |
| 3 | Personal Finance Management Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance. | |
| | Occupational Safety, Health & Environment Education | |
| 1 | Safety & Health Introduction to Occupational Safety and Health importance of safety and health at workplace. | 08 |
| 2 | Occupational Hazards Basic Hazards, Chemical Hazards, Vibroacoustic 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 | |

| | | |
|---|---|-----------|
| | Labour Welfare Legislation | |
| 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. | 02 |
| | Quality Tools | |
| 1 | Quality Consciousness: Meaning of quality, Quality Characteristic | 05 |
| 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 | House Keeping: Purpose of Housekeeping, Practice of good Housekeeping. | |
| 4 | Quality Tools Basic quality tools with a few examples | |

8.2 PRACTICAL TRAINING (ON-JOB TRAINING)

DURATION: 12 MONTHS

GENERAL INFORMATION

1. Name of the Trade : **In-plant Logistics Executive**
(Supply chain)
2. Duration of On-Job Training :12 months.
3. Instructor Qualification :
 - i) Degree/Diploma in Mechanical Engineering from recognized university/Board with one/two-year post qualification experience in the relevant field.
 - OR
 - ii) LSC approved Packaging with three-year post qualification experience in the relevant field.
- 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 industry. Health, Safety & Environment:**
Introduction to safety Equipment's and their uses. Demonstration of 5S Concept on shop floor. Use of Personal Protective Equipment's (PPE).
- ❖ Familiarization with the various dangerous goods being handles in the industry and associated precautionary and handling measures
- ❖ Prepare different types of documentation as per industrial need using different methods of recording information.
- ❖ Develop good appearance and behavior, practice, tasks as per industry standard and express good communication skill.
- ❖ Prepare and maintain work area and maintain health and safety at the work place.
- ❖ Explain the various activities in In-plant logistics
- ❖ Carryout the activities like receiving, sorting, put away, sorting, loading, unloading, packing, dispatch, evaluating quality parameters, co-coordinating between procurement, storage and dispatch, getting receipt and delivery acknowledgments and reports
- ❖ Identify the different types of materials that are being handled inside the organization raw materials and intermediaries as well as WIPs and finished goods.
- ❖ Understand the uses and limitations of each type of inventory management systems as well as handling equipment
- ❖ Develop in-bound and out-bound schedules based on information to maximize efficiency and minimize costs
- ❖ Maintain safe distance in working area and use PPE's all time.
- ❖ Understand the product's end use to get better knowledge on its handling and storage purposes.

- ❖ When goods reach the inventory check whether all process has been completed and conduct a verification of the goods.
- ❖ Understand different equipment available to know how to use each of it.
- ❖ Adhere to the Utilization of time required in each inventory, inbound and outbound process
- ❖ Handling of critical goods and understand the precautions to be taken.
- ❖ Check whether goods are in good conditions before dispatch.
- ❖ Maintain safety and security at all times
- ❖ Identify the designated place for each type of goods within storage.
- ❖ Hazards goods should be stored with danger symbols and its location.
- ❖ Using of different types of inventory methods available at the shop floor and handling various dispatch and receipt orders, practice for better ways.
- ❖ Build on effective communication with inter departments, sub-ordinate for smooth packaging and safety procedures.
- ❖ Perform TPM (Total Production Management), TQM (Total Quality Management) and record keeping system.

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

Employment opportunities:

On successful completion of this course, the candidates may be gainfully employed in the following industries:

1. Warehouses / Stores / Distribution centers / Fulfillment Centre / Mother Hub
2. Courier consolidation Centers
3. Transportation Companies
4. Airports / Air Cargo Terminals / Air Freight Stations
5. CFS / ICDs' / Port Terminals
6. Manufacturing Plants (Automobile / FMCG / Hazardous Goods)

ANNEXURE – I

TOOLS & EQUIPMENTS FOR BASIC TRAINING

INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL KNOWLEDGE

**TRADE:In-plant Logistics Executive
(Supply Chain)**

APPRENTICES TOOL KIT:-

| Sl. No. | Name of the items | Quantity (indicative) |
|----------------|-------------------------------|---|
| 1. | Safety Shoes | 20 pairs |
| 2. | Safety Helmet | 20 |
| 3. | Gloves | 20 pairs |
| 4. | Reflector Jackets | 20 |
| 5. | Ear Plugs | 20 pairs |
| 6. | Industrial Goggles | 20 |
| 7. | SOP Charts | 20 |
| 8. | Safety Norms Handbook | 20 |
| 9. | Technical specification Sheet | 1 x 5sets (1 each/ packing machines type) |
| 10. | Material Safety Data Sheet | 20 |
| 11. | DO's and Don'ts Sheet | 1 x 5 sets (1 each/ packing machines type) |

Note: In case of basic training the BTP may hire the Material Handling Equipment 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 : In-plant Logistics Executive(Supply Chain)

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 shortfall.

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 | |