

LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

JOB ROLE: Warehouse Binner

(QUALIFICATION PACK: Ref. Id. LSC/Q2105)

SECTOR: Logistics

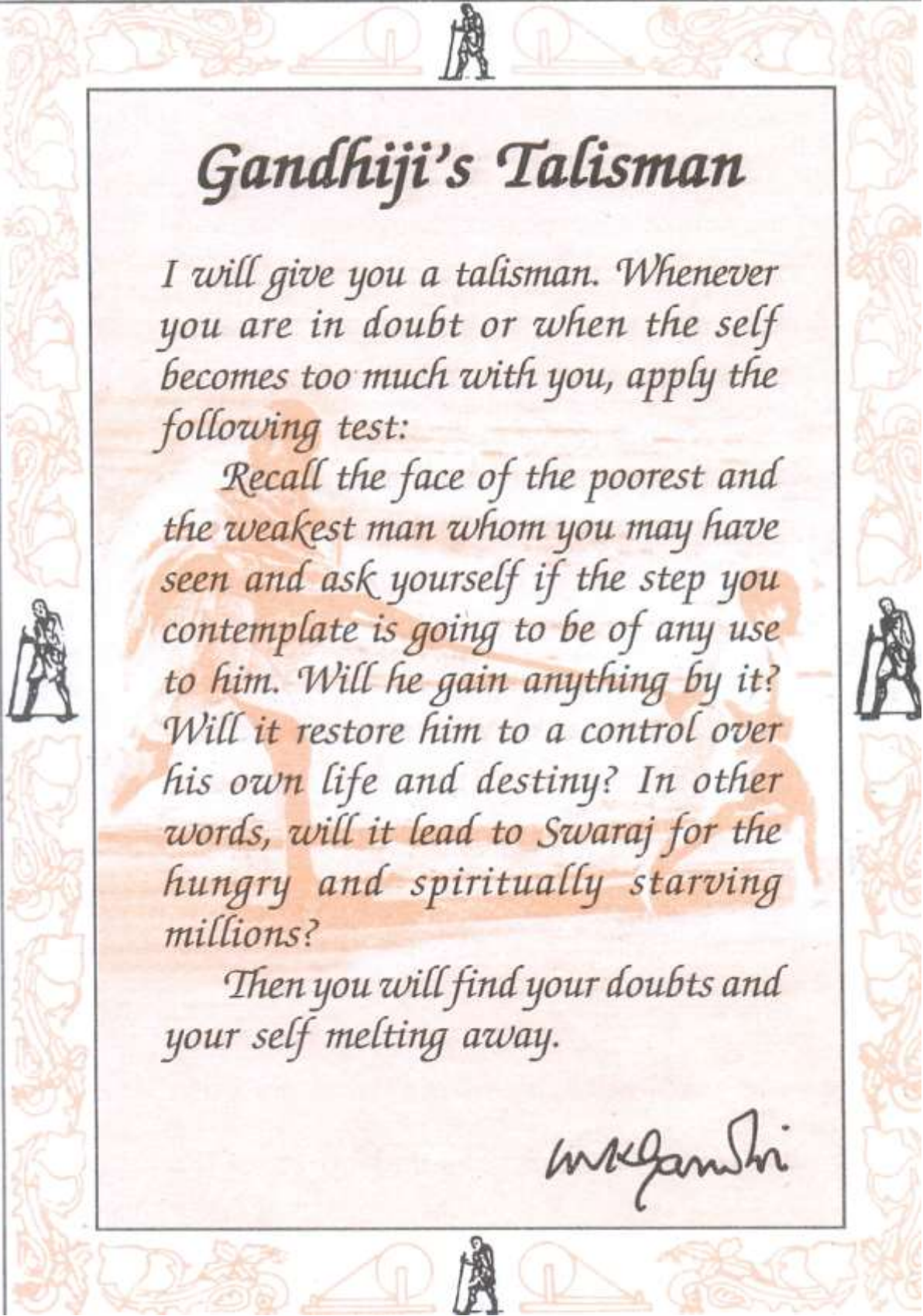
Classes 9 and 10



PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION

Shyamla Hills, Bhopal - 462 013, M.P., India

<http://www.psscive.ac.in>



Gandhiji's Talisman

I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test:

Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?

Then you will find your doubts and your self melting away.

M.K. Gandhi

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CURRICULUM**

Logistics – Warehouse Binner

June, 2017

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FOREWORD

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) a constituent of the National Council of Educational Research and Training (NCERT) is spearheading the efforts of developing learning outcome based curricula and courseware aimed at integrating both vocational and general qualifications to open pathways of career progression for students. It is a part of Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education (CSSVSHSE) launched by the Ministry of Human Resource Development, Government of India in 2012. The PSS Central Institute of Vocational Education (PSSCIVE) is developing curricula under the project approved by the Project Approval Board (PAB) of *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA). The main purpose of the learning outcome based curricula is to bring about the improvement in teaching-learning process and working competences through learning outcomes embedded in the vocational subject.

It is a matter of great pleasure to introduce this learning outcome based curriculum as part of the vocational training packages for the job role of Warehouse Binner. The curriculum has been developed for the secondary students of vocational education and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualification Framework (NSQF).

The curriculum aims to provide children with employability and vocational skills to support occupational mobility and lifelong learning. It will help them to acquire specific occupational skills that meet employers' immediate needs. The teaching process is to be performed through the interactive sessions in classrooms, practical activities in laboratories and workshops, projects, field visits, and professional experiences.

The curriculum has been developed and reviewed by a group of experts and their contributions are greatly acknowledged. The utility of the curriculum will be adjudged by the qualitative improvement that it brings about in teaching-learning. The feedback and suggestions on the content by the teachers and other stakeholders will be of immense value to us in bringing about further improvement in this document.

Hrushikesh Senapaty
Director
National Council of Education Research and Training

PREFACE

India today stands poised at a very exciting juncture in its saga. The potential for achieving inclusive growth are immense and the possibilities are equally exciting. The world is looking at us to deliver sustainable growth and progress. To meet the growing expectations, India will largely depend upon its young workforce. The much-discussed demographic dividend will bring sustaining benefits only if this young workforce is skilled and its potential is channelized in the right direction.

In order to fulfil the growing aspirations of our youth and the demand of skilled human resource, the Ministry of Human Resource Development (MHRD), Government of India introduced the revised Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education that aims to provide for the diversification of educational opportunities so as to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative for those pursuing higher education. For spearheading the scheme, the PSS Central Institute of Vocational Education (PSSCIVE) was entrusted the responsibility to develop learning outcome based curricula, student workbooks, teacher handbooks and e-learning materials for the job roles in various sectors, with growth potential for employment.

The PSSCIVE firmly believes that the vocationalisation of education in the nation need to be established on a strong footing of philosophical, cultural and sociological traditions and it should aptly address the needs and aspirations of the students besides meeting the skill demands of the industry. The curriculum, therefore, aims at developing the desired professional, managerial and communication skills to fulfil the needs of the society and the world of work. In order to honour its commitment to the nation, the PSSCIVE has initiated the work on developing learning outcome based curricula with the involvement of faculty members and leading experts in respective fields. It is being done through the concerted efforts of leading academicians, professionals, policy makers, partner institutions, Vocational Education and Training experts, industry representatives, and teachers. The expert group through a series of consultations, working group meetings and use of reference materials develops a National Curriculum. Currently, the Institute is working on developing curricula and courseware for over 100 job roles in various sectors.

We extend our gratitude to all the contributors for selflessly sharing their precious knowledge, acclaimed expertise, and valuable time and positively responding to our request for development of curriculum. We are grateful to MHRD and NCERT for the financial support and cooperation in realising the objective of providing learning outcome based modular curricula and courseware to the States and other stakeholders under the PAB (Project Approval Board) approved project of *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) of MHRD.

Finally, for transforming the proposed curriculum design into a vibrant reality of implementation, all the institutions involved in the delivery system shall have to come together with a firm commitment and they should secure optimal community support. The success of this curriculum depends upon its effective implementation and it is expected that the managers of vocational education and training system, including subject teachers will make efforts to create better facilities, develop linkages with the world of work and foster a conducive environment as per the content of the curriculum document.

The PSSCIVE, Bhopal remains committed in bringing about reforms in the vocational education and training system through the learner-centric curricula and courseware. We hope that this document will prove useful in turning out more competent Indian workforce for the 21st century.

RAJESH P. KHAMBAYAT
Joint Director
PSS Central Institute of Vocational Education

ACKNOWLEDGEMENTS

On behalf of the team at the PSS Central Institute of Vocational Education (PSSCIVE) we are grateful to the members of the Project Approval Board (PAB) of *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) and the officials of the Ministry of Human Resource Development (MHRD), Government of India for the financial support to the project for development of curricula.

We are grateful to the Director, NCERT for his support and guidance. We also acknowledge the contributions of our colleagues at the Technical Support Group of RMSA, MHRD, RMSA Cell at the National Council of Educational Research and Training (NCERT), National Skill Development Agency (NSDA) and National Skill Development Corporation (NSDC) and Logistics Skill Council (LSC) for their academic support and cooperation.

We are thankful to the course coordinator P. Veeraiah and experts for their untiring efforts and contributions in the development of this learning outcome based curriculum. Their names are acknowledged in the list of contributors. We are also thankful to L. N. Verma, Retired Professor, National Institute of Technical Teachers Training Institute, Shyamla Hills, Bhopal and B. L. Gupta Professor, Department of Management, National Institute of Technical Teachers Training Institute, Shyamla Hills, Bhopal, reviewed the curriculum.

The contributions made by Vinay Swarup Mehrotra, Professor and Head, Curriculum Development and Evaluation Centre (CDEC), Vipin Kumar Jain, Associate Professor and Head, Programme Planning and Monitoring Cell (PPMC) and Dipak Shudhalwar, Associate Professor, Department of Engineering & Technology, PSSCIVE in development of the curriculum for the employability skills and Ankita Pandey and Geeta Tomar, Consultant, Department of Business and Commerce, PSSCIVE, Bhopal, in development of the curriculum for the vocational skills are duly acknowledged.

We acknowledge the assistance provided by J. M. Wallace, Computer Operator Grade II in typing and composing of the material.

PSSCIVE Team

CONTENTS

| Sl. No. | Title | Page No. |
|---------|--|----------|
| | Foreword | (i) |
| | Preface | (ii) |
| | Acknowledgements | (iv) |
| 1. | Course Overview | 1 |
| 2. | Scheme of Units | 2 |
| 3. | Teaching/Training Activities | 3 |
| 4. | Assessment and Certification | 4 |
| 5. | Unit Content | |
| | CLASS 9 | |
| | Part A Employability Skills | |
| | Unit 1: Communication Skills -I | 7 |
| | Unit 2: Self-management Skills -I | 8 |
| | Unit 3: Information and Communication Technology Skills - I | 8 |
| | Unit 4: Entrepreneurial Skills - I | 9 |
| | Unit 5: Green Skills - I | 10 |
| | Part B Vocational Skills | |
| | Unit 1: Basics of Supply Chain, Logistics and Warehousing | 11 |
| | Unit 2: Receiving and Storage of Goods | 12 |
| | Unit 3: Bin Management | 13 |
| | Unit 4: Methods and Procedure of Binning | 14 |
| | CLASS 10 | |
| | Part A Employability Skills | |
| | Unit 1: Communication Skills - II | 15 |
| | Unit 2: Self-management Skills - II | 16 |
| | Unit 3: Information and Communication Technology Skills - II | 16 |
| | Unit 4: Entrepreneurial Skills - II | 17 |
| | Unit 5: Green Skills - II | 17 |
| | Part B Vocational Skills | |
| | Unit 1: Verification of Binned goods | 19 |
| | Unit 2: Operational and Documentation Procedure | 20 |
| | Unit 3: Housekeeping Activities | 21 |
| | Unit 4: Health, Safety and Security Measures | 22 |
| 6. | Organisation of Field Visits | 23 |
| 7. | List of Equipment and Materials | 23 |
| 8. | Vocational Teacher's/ Trainer's Qualification and Guidelines | 25 |
| 9. | List of Contributors | 27 |

1. COURSE OVERVIEW

COURSE TITLE: Logistics - Warehouse Binner

Warehouses are vital components of the distribution logistic and have a significant role in the supply chain at national and international level. Warehousing is often confused with 'storage' but it encompasses sorting, packaging, labelling, safety/quarantine treatments (pest control, fumigation, etc.) also, along with safe storage of goods. For becoming a successful binner the understanding and skills in warehousing are necessary.

Storage of goods is as important as the manufacturing, marketing and transportation of goods. Storage involves receipt, identification, verification, sorting, putting away and retrieval for issue and even maintenance of goods. Thus, warehousing is a combination of number of activities performed in accordance with each other.

Storage is an essential activity for many business enterprises. Goods are stored to avoid sudden shortage. In order to avoid the situation such as price rise or sudden surge in demand, warehousing of goods is a good scheme. Raw material also needs to be stored so as to ensure uninterrupted supplies during a production cycle.

After completion of this course the learner would be able to work as warehouse binner to look after to bin items to put away into storage. He/she is responsible for binning items according to an inventory list. Additional responsibilities could at times may include moving cargo, re-packaging items and documenting cargo that has been moved. The difference in tasks performed under the Binner role thus varies according to the volume of operations, however the core function of the role is to bin items and put away into storage. This job requires working well with his/her team and achieving joint goals. He/she must be able to prioritize and execute tasks within scheduled time limits. He/she should be able to maintain high concentration levels throughout his/her shift.

COURSE OUTCOMES: On completion of the course, students should be able to:

- Apply effective oral and written communication skills to interact with people and customers;
- Identify the principal components of a computer system;
- Demonstrate the basic skills of using computer;
- Demonstrate self-management skills;
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;
- Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
- Identify and control hazards in the workplace that pose a danger or threat to their safety or health, or that of others.
- Identify and demonstrate safe use of hand and power tools/equipment used in warehouses;
- Prepare for binning in warehousing and storage.
- Perform binning activities in warehousing and storage.
- Perform post-binning activities in warehousing and storage.
- Carry out housekeeping activities in the warehouses.
- Carry out safety, security and maintenance in warehousing and storage.
- Determine generic skills of binning process in warehousing and storage.
- Show professional skills of binning process in warehousing and storage.
- Recognize the benefits of great customer service;
- Provide customers necessary information appropriately and systematically;
- Use techniques to provide services based on customer's needs and wants;

- Administer first aid to a casualty with small cuts, grazes, bruises, external bleeding, minor burns and scalds

COURSE REQUIREMENTS: The learner should have the basic knowledge of Warehouse and Logistics.

COURSE LEVEL: This is a beginner level course. On completion of this course, a student can take up an Intermediate level course for a job role in warehouse and storage operations such as Documentation Assistant, Receiving Assistant and Warehouse Quality Checker in Class XI and Class XII.

COURSE DURATION: 400 hrs
 Class 9 : 200 hrs
 Class 10 : 200 hrs

Total : 400 hrs

2. SCHEME OF UNITS

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9 and 10 opting for vocational subject along with general education subjects. The unit-wise distribution of hours and marks for Class 9 is as follows:

| CLASS 9 | | | |
|---------------|---|--|--|
| Units | | No. of Hours for Theory and Practical 200 | Max. Marks for Theory and Practical 100 |
| Part A | Employability Skills | | |
| | Unit 1: Communication Skills -I | 20 | 10 |
| | Unit 2: Self-management Skills -I | 10 | |
| | Unit 3: Information and Communication Technology Skills - I | 20 | |
| | Unit 4: Entrepreneurial Skills - I | 15 | |
| | Unit 5: Green Skills - I | 10 | |
| | | 75 | 10 |
| Part B | Vocational Skills | | |
| | Unit 1: Basics of Supply Chain, Logistics and Warehousing | 20 | 30 |
| | Unit 2: Receiving and Storage of Goods | 25 | |
| | Unit 3: Bin Management | 25 | |
| | Unit 4: Methods and Procedure of Binning | 25 | |
| | | 95 | 30 |
| Part C | Practical Work | | |
| | Practical Examination | 06 | 15 |
| | Written Test | 01 | 10 |
| | Viva Voce | 03 | 10 |
| | | 10 | 35 |

| | | | |
|---------------|--|------------|------------|
| Part D | Project Work/Field Visit | | |
| | Practical File/Student Portfolio | 10 | 10 |
| | Viva Voce | 05 | 05 |
| | | 15 | 15 |
| Part E | Continuous and Comprehensive Evaluation (CCE) | | |
| | | 05 | 10 |
| | Total | 200 | 100 |

The unit-wise distribution of hours and marks for Class 10 is as follows:

| CLASS 10 | | | |
|-----------------|--|--|--|
| Units | | No. of Hours for Theory and Practical 200 | Max. Marks for Theory and Practical 100 |
| Part A | Employability Skills | | |
| | Unit 1: Communication Skills - II | 20 | 10 |
| | Unit 2: Self-management Skills - II | 10 | |
| | Unit 3: Information and Communication Technology Skills - II | 20 | |
| | Unit 4: Entrepreneurial Skills - II | 15 | |
| | Unit 5: Green Skills - II | 10 | |
| | | 75 | |
| Part B | Vocational Skills | | |
| | Unit 1: Verification of Binned goods | 25 | 30 |
| | Unit 2: Operational and Documentation Procedure | 25 | |
| | Unit 3: Housekeeping Activities | 25 | |
| | Unit 4: Health, Safety and Security Measures | 20 | |
| | | 95 | 30 |
| Part C | Practical Work | | |
| | Practical Examination | 06 | 15 |
| | Written Test | 01 | 10 |
| | Viva Voce | 03 | 10 |
| | | 10 | 35 |
| Part D | Project Work/Field Visit | | |
| | Practical File/Student Portfolio | 10 | 10 |
| | Viva Voce | 05 | 05 |
| | | 15 | 15 |
| Part E | Continuous and Comprehensive Evaluation (CCE) | | |
| | | 05 | 10 |
| | Total | 200 | 100 |

3. TEACHING/TRAINING ACTIVITIES

The teaching and training activities have to be conducted in classroom, laboratory/ workshops and field visits. Students should be taken to field visits for interaction with experts and to expose them to the various tools, equipment, materials, procedures and operations in the workplace. Special emphasis should be laid on the occupational safety, health and hygiene during the training and field visits.

CLASSROOM ACTIVITIES

Classroom activities are an integral part of this course and interactive lecture sessions, followed by discussions should be conducted by trained vocational teachers. Vocational teachers should make effective use of a variety of instructional or teaching aids, such as audio-video materials, colour slides, charts, diagrams, models, exhibits, hand-outs, online teaching materials, etc. to transmit knowledge and impart training to the students.

PRACTICAL WORK IN LABORATORY/WORKSHOP

Practical work may include but not limited to hands-on-training, simulated training, role play, case based studies, exercises, etc. Equipment and supplies should be provided to enhance hands-on learning experience of students. Only trained personnel should teach specialized techniques. A training plan that reflects tools, equipment, materials, skills and activities to be performed by the students should be submitted by the vocational teacher to the Head of the Institution.

FIELD VISITS/ EDUCATIONAL TOUR

In field visits, children will go outside the classroom to obtain specific information from experts or to make observations of the activities. A checklist of observations to be made by the students during the field visits should be developed by the Vocational Teachers for systematic collection of information by the students on the various aspects. Principals and Teachers should identify the different opportunities for field visits within a short distance from the school and make necessary arrangements for the visits. At least three field visits should be conducted in a year.

4. ASSESSMENT AND CERTIFICATION

Upon successful completion of the course by the candidate, the Central/ State Examination Board for Secondary Education and the respective Sector Skill Council will certify the competencies.

The National Skills Qualifications Framework (NSQF) is based on outcomes referenced to the National Occupation Standards (NOSs), rather than inputs. The NSQF level descriptors, which are the learning outcomes for each level, include the process, professional knowledge, professional skills, core skills and responsibility. The assessment is to be undertaken to verify that individuals have the knowledge and skills needed to perform a particular job and that the learning programme undertaken has delivered education at a given standard. It should be closely linked to certification so that the individual and the employer could come to know the competencies acquired through the vocational subject or course. The assessment should be reliable, valid, flexible, convenient, cost effective and above all it should be fair and transparent. Standardized assessment tools should be used for assessment of knowledge of students. Necessary arrangements should be made for using technology in assessment of students.

KNOWLEDGE ASSESSMENT (THEORY)

Knowledge Assessment should include two components: one comprising of internal assessment and second an external examination, including theory examination to be conducted by the Board. The assessment tools shall contain components for testing the

knowledge and application of knowledge. The knowledge test can be objective paper based test or short structured questions based on the content of the curriculum.

WRITTEN TEST

It allows candidates to demonstrate that they have the knowledge and understanding of a given topic. Theory question paper for the vocational subject should be prepared by the subject experts comprising group of experts of academicians, experts from existing vocational subject experts/teachers, subject experts from university/colleges or industry. The respective Sector Skill Council should be consulted by the Central/State Board for preparing the panel of experts for question paper setting and conducting the examinations.

The blue print for the question paper may be as follows:

Duration: 3 hrs

Max. Mark: 30

| Sl.No. | Typology of Question | No. of Questions | | | Marks |
|--------|--|----------------------------|------------------------|-----------------------|------------------------------|
| | | Very Short Answer (1 mark) | Short Answer (2 Marks) | Long Answer (3 Marks) | |
| 1. | Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information) | 2 | 1 | 2 | 10 |
| 2. | Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information) | 1 | 2 | 2 | 11 |
| 3. | Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, provide an example, or solve a problem) | 0 | 1 | 1 | 05 |
| 4. | High Order Thinking Skills – (Analysis & Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources) | 0 | 1 | 0 | 02 |
| 5. | Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values) | 0 | 1 | 0 | 02 |
| | Total | 3x1=3 | 6x2=12 | 5x3=15 | 30 (14 questions) |

SKILL ASSESSMENT (PRACTICAL)

Assessment of skills by the students should be done by the assessors/examiners on the basis of practical demonstration of skills by the candidate, using a competency checklist. The competency checklist should be developed as per the National Occupation Standards (NOSs) given in the Qualification Pack for the Job Role to bring about necessary consistency in the quality of assessment across different sectors and Institutions. The student has to demonstrate competency against the performance criteria defined in the National Occupation Standards and the assessment will indicate that they are 'competent', or are 'not yet competent'. The assessors assessing the skills of the students should possess a current experience in the industry and should have undergone an effective training in assessment principles and practices. The Sector Skill Councils should ensure that the assessors are provided with the training on the assessment of competencies.

Practical examination allows candidates to demonstrate that they have the knowledge and understanding of performing a task. This will include hands-on practical exam and viva voce. For practical, there should be a team of two evaluators – the subject teacher and the expert from the relevant industry certified by the Board or concerned Sector Skill Council. The same team of examiners will conduct the viva voce.

Project Work (individual or group project) is a great way to assess the practical skills on a certain time period or timeline. Project work should be given on the basis of the capability of the individual to perform the tasks or activities involved in the project. Projects should be discussed in the class and the teacher should periodically monitor the progress of the project and provide feedback for improvement and innovation. Field visits should be organised as part of the project work. Field visits can be followed by a small-group work/project work. When the class returns from the field visit, each group might be asked to use the information that they have gathered to prepare presentations or reports of their observations. Project work should be assessed on the basis of practical file or student portfolio.

Student Portfolio is a compilation of documents that supports the candidate's claim of competence. Documents may include reports, articles and photos of products prepared by students in relation to the unit of competency.

Viva voce allows candidates to demonstrate communication skills and content knowledge. Audio or video recording can be done at the time of viva voce. The number of external examiners would be decided as per the existing norms of the Board and these norms should be suitably adopted/adapted as per the specific requirements of the vocational subject. Viva voce should also be conducted to obtain feedback on the student's experiences and learning during the project work/field visits.

CONTINUOUS AND COMPREHENSIVE EVALUATION

Continuous and Comprehensive Evaluation (CCE) refers to a system of school-based evaluation of students that covers all aspects of student's development. In this scheme, the term 'continuous' is meant to emphasize that evaluation of identified aspects of students 'growth and development' is a continuous process rather than an event, built into the total teaching-learning process and spread over the entire span of academic session. The second term 'comprehensive' means that the scheme attempts to cover both the scholastic and the co-scholastic aspects of students' growth and development. For details, the CCE manual of Central Board of Secondary Education (CBSE) or the guidelines issued by the State Boards on the procedure for CCE should be followed by the Institutions.

5. UNIT CONTENTS

CLASS 9

Part A: Employability Skills

| Sl. No. | Units | Duration (Hrs) |
|--------------|---|----------------|
| 1. | Communication Skills - I | 20 |
| 2. | Self-management Skills - I | 10 |
| 3. | Information and Communication Technology Skills-I | 20 |
| 4. | Entrepreneurial Skills - I | 15 |
| 5. | Green Skills - I | 10 |
| Total | | 75 |

| Unit 1: Communication Skills - I | | | |
|---|--|---|--------------------------------|
| Learning Outcome | Theory (08 hrs) | Practical (12 hrs) | Total Duration (20 Hrs) |
| 1. Demonstrate knowledge of various methods of communication | 1. Methods of communication - Verbal - Non-verbal - Visual | 1. Writing pros and cons of written, verbal and non-verbal communication 2. Listing do's and don'ts for avoiding common body language mistakes | 05 |
| 2. Identify elements of communication cycle | 1. Meaning of communication 2. Importance of communication skills 3. Elements of communication cycle– (i) sender, (ii) ideas, (iii) encoding, (iv) communication channel, (v) receiver, (vi) decoding, and (vii) feedback | 1. Draw a diagram of communication cycle 2. Role plays on communication process related to the sector/job role | 05 |
| 3. Identify the factors affecting our perspectives in communication | 1. Perspectives in communication 2. Factors affecting perspectives in communication - Visual perception - Language - Past experience - Prejudices - Feelings - Environment | 1. Group discussion on factors affecting perspectives in communication 2. Sharing of experiences on factors affecting perspectives 3. Sharing experiences on factors affecting communication at workplace | 05 |

| | | | |
|--|---|--|-----------|
| 4. Demonstrate the knowledge of basic writing skills | 1. Writing skills related to the following: <ul style="list-style-type: none"> • Phrases • Kinds of sentences • Parts of sentence • Parts of speech • Use of articles • Construction of a paragraph | 1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject | 05 |
| Total | | | 20 |

Unit 2: Self-management Skills – I

| Learning Outcome | Theory (07 hrs) | Practical (03 hrs) | Total Duration (10 Hrs) |
|--|--|---|--------------------------------|
| 1. Describe the meaning and importance of self-management | 1. Meaning of self-management 2. Positive results of self-management 3. Self-management skills | 1. Identification of self-management skills 2. Strength and 3. weakness analysis | 05 |
| 2. Identify the factors that helps in building self-confidence | 1. Factors that help in building self-confidence – social, cultural, and physical factors 2. Self-confidence building tips – getting rid of the negative thoughts, thinking positively, staying happy with small things, staying clean, hygienic and smart, chatting with positive people, etc. | 1. Role play exercises on building self-confidence 2. Use of positive metaphors/ words 3. Positive stroking on wakeup and before going bed 4. Helping others and working for community | 05 |
| Total | | | 10 |

Unit 3: Information and Communication Technology Skills – I

| Learning Outcome | Theory (06 hrs) | Practical (14 hrs) | Total Duration (20 Hrs) |
|---|--|--|--------------------------------|
| 1. Describe the role of Information and Communication Technology (ICT) in day-to-day life and workplace | 1. Introduction to ICT 2. Role and importance of ICT in personal life and at workplace 3. ICT in our daily life (examples) 4. ICT tools - Mobile, tab, radio, TV, email, etc. | 1. Discussion on the role and importance of ICT in personal life and at workplace. 2. Preparing posters / collages for showing the role of ICT at workplace | 04 |
| 2. Identify components of basic computer system and their functions | 1. Computer system - Central Processing Unit (CPU), memory, motherboard, storage devices 2. Hardware and software of a computer system 3. Role and functions of | 1. Connecting the cables and peripherals to the Central Processing Unit 2. Starting and shutting down a computer | 07 |

| | | | |
|--|--|---|-----------|
| | <p>Random Access Memory(RAM) and Read Only Memory(ROM)</p> <p>4. Role and functions of Central Processing Unit</p> <p>5. Procedure for starting and shutting down a computer</p> | <p>3. Group discussion on the various aspects of hardware and software</p> | |
| <p>3. Demonstrate use of various components and peripherals of computer system</p> | <p>1. Peripherals devices and their uses – mouse, keyboard, scanner, webcam, etc. of a computer system</p> | <p>1. Identification of various parts and peripherals of a computer</p> <p>2. Demonstration and practice on the use of mouse</p> <p>3. Demonstration and practice on the use of keyboard</p> <p>4. Demonstration of the uses of printers, webcams, scanner and other peripheral devices</p> <p>5. Drawing diagram of computer system and labelling it</p> | 05 |
| <p>4. Demonstrate basic computer skills</p> | <p>1. Primary operations on a computer system – input, process, storage, output, communication networking, etc.</p> | <p>1. Identification of the various input and output units and explanation of their purposes</p> | 04 |
| Total | | | 20 |

Unit 4: Entrepreneurial Skills - I

| Learning Outcome | Theory (06 hrs) | Practical (09 hrs) | Total Duration (15 Hrs) |
|---|---|---|--------------------------------|
| <p>1. Identify various types of business activities</p> | <p>1. Types of businesses – service, manufacturing, hybrid</p> <p>2. Types of businesses found in our community</p> <p>3. Business activities around us</p> | <p>1. Prepare posters of business activities found in cities/villages, using pictures</p> <p>2. Discuss the various types of activities, generally adopted by small businesses in a local community</p> <p>3. Best out of waste</p> <p>4. Costing of the product made out of waste</p> <p>5. Selling of items made from waste materials</p> <p>6. Prepare list of businesses that provides goods and services in exchange for</p> | 09 |

| | | | |
|--|--|---|-----------|
| | | money | |
| 2. Demonstrate the knowledge of distinguishing characteristics of entrepreneurship | <ol style="list-style-type: none"> 1. Meaning of entrepreneurship development 2. Distinguishing characteristics of entrepreneurship 3. Role and rewards of entrepreneurship | <ol style="list-style-type: none"> 1. Prepare charts showing advantages of entrepreneurship over wages 2. Group discussions on role and features of entrepreneurship 3. Lectures/presentations by entrepreneurs on their experiences and success stories 4. Identify core skills of successful entrepreneur | 06 |
| Total | | | 15 |

Unit 5: Green Skills - I

| Learning Outcome | Theory (07 hrs) | Practical (03 hrs) | Total Duration (10 Hrs) |
|--|---|---|--------------------------------|
| 1. Demonstrated the knowledge of the factors influencing natural resource conservation | <ol style="list-style-type: none"> 1. Introduction to environment, 2. Relationship between society and environment, ecosystem and factors causing imbalance 3. Natural resource conservation 4. Environment protection and conservation | <ol style="list-style-type: none"> 1. Group discussion on hazards of deteriorating environment 2. Prepare posters showing environment conservation 3. Discussion on various factors that influence our environment | 05 |
| 2. Describe the importance of green economy and green skills | <ol style="list-style-type: none"> 1. Definition of green economy 2. Importance of green economy | <ol style="list-style-type: none"> 1. Discussion on the benefits of green skills and importance of green economy 2. Prepare a Poster showing the importance of green economy with the help of newspaper/magazine cuttings | 05 |
| Total | | | 10 |

Part B: Vocational Skills

| Sl. No. | Units | Duration (Hrs) |
|--------------|---|----------------|
| 1. | Basics of Supply Chain, Logistics and Warehousing | 25 |
| 2. | Receiving and Storage of Goods | 25 |
| 3. | Bin Management | 25 |
| 4. | Methods and Procedure of Binning | 20 |
| Total | | 95 |

| Unit 1: Basics of Supply Chain, Logistics and Warehousing | | | |
|--|--|--|------------------------|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25Hrs) |
| 1. Describe the supply chain | <ol style="list-style-type: none"> 1. Concept of supply chain 2. Functions of supply chain 3. Types of supply chain 4. Importance of supply chain 5. Logistics | <ol style="list-style-type: none"> 1. Prepare a chart showing basic functions and requirements of supply chain and logistics 2. Visit to a post office to understand the difference between public and private sector functionality. | 05 |
| 2. Explain the Concepts of Logistics | <ol style="list-style-type: none"> 1. Introduction to logistics 2. Major functions of Logistics 3. Subsectors in logistics 4. Correlation of subsectors 5. Logistics and warehousing | <ol style="list-style-type: none"> 1. Prepare a chart showing all subsectors of logistics 2. Draw a chart to correlate the logistics with warehousing | 05 |
| 3. Describe fundamentals of warehousing | <ol style="list-style-type: none"> 1. Warehousing 2. Meaning and Definition of Warehousing 3. Needs of warehousing 4. Benefits of warehousing 5. Aims of warehousing 6. Principles of warehousing 7. Warehousing Elements | <ol style="list-style-type: none"> 1. Visit to a warehouse and note down fundamental aspects of warehousing 2. Identify the needs of warehousing in a given situations 3. Prepare a report on benefits of warehouse after a visit | 07 |
| 4. Describe the functions and classifications of warehouses | <ol style="list-style-type: none"> 1. Functions of warehousing 2. Classification of warehouses 3. Classification on the basis of ownership, structure, product handled, operations, locations etc. | <ol style="list-style-type: none"> 1. Identify the types of warehouses in a given situation 2. Classify the goods and their respective warehouses in a given situation | 08 |
| Total | | | 25 |

| Unit 2: Receiving and Storage of Goods | | | |
|---|--|---|---------------------------------------|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25Hrs) |
| 1. Identify the shift schedule and inward documents | <ol style="list-style-type: none"> 1. Meaning of shift schedule 2. Inward documents <ul style="list-style-type: none"> - Inbound list - Inventory log 3. Verification <ul style="list-style-type: none"> - Unloaded items against inward documents - Sign off the items as received | <ol style="list-style-type: none"> 1. Visit a warehouse and prepare the format of shift schedule and inward documents 2. Prepare a chart on the importance of verification | 06 |
| 2. Report on quality schedule and variance and obtaining binning list | <ol style="list-style-type: none"> 1. Report on <ul style="list-style-type: none"> - Damages - Quality - Schedule variance 2. Meaning of binning list 3. Format of binning list 4. Location for storage of items 5. Need of locate binned items in storage | <ol style="list-style-type: none"> 1. Visit to a warehouse to understand the how to report if damages, quality and schedule variance take place. 2. Prepare a binning list 3. Identify the need of locating items in storage. | 06 |
| 3. Check received packages | <ol style="list-style-type: none"> 1. Meaning of discrepancies 2. Types of discrepancies receiving load 3. Report to supervisor about the potential fixes/ issues 4. Actions taken against discrepancies occurred | <ol style="list-style-type: none"> 1. Visit to a warehouse to know about the types of discrepancies occurred in warehouse 2. Demonstrate through role play how to report supervisor about the discrepancies. 3. List out the actions taken against the discrepancies | 07 |
| 4. Describe the re-packing of goods | <ol style="list-style-type: none"> 1. Meaning of re-packing 2. Need of re-packing, 3. Importance of re-packing 4. Functions of specialized packer 5. Conditioning for packing good per their nature 6. Label package 7. Features of labeling <ul style="list-style-type: none"> - Package number - Inventory ID - Symbols used in package | <ol style="list-style-type: none"> 1. Demonstrate how to pack different types of products as per their nature 2. List out functions of specialized packer 3. Prepare a char on features of labeling | 06 |
| Total | | | 25 |

| Unit 3: Bin Management | | | |
|---|---|---|--|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25 Hrs) |
| 1. Identify bay area | <ol style="list-style-type: none"> 1. Meaning of storage bays / bins 2. Importance of bin 3. Key Competencies of Binner 4. Steps in Binning process 5. Functions of Binner | <ol style="list-style-type: none"> 1. Prepare a chart on Binning Process 2. Demonstrate the key competencies of a Binner in a given situation | 05 |
| 2. Describe the storage system in binning process | <ol style="list-style-type: none"> 1. Meaning of Warehouse Management System (WMS) and its uses 2. Goals and element of WMS 3. System and process of WMS 4. Operational functions of warehouse 5. Meaning of Enterprise Resource Planning (ERP) Software and its uses 6. Report to supervisor <ul style="list-style-type: none"> - If current location full - Alternate location for storage 7. Assure about the cleaning <ul style="list-style-type: none"> - Bins - Containers - Shelves - Pallets | <ol style="list-style-type: none"> 1. Visit warehouse to understand the storage system 2. Prepare a chart on WMS and ERP 3. Learning Warehouse Management System by performing various functions involved in a warehousing and operational activities at warehouse | 05 |
| 3. Obtain the list of bin products | <ol style="list-style-type: none"> 1. Meaning of binning list 2. Nature of products 3. Equipments used in binning process 4. Labelling 5. Package labels and warehouse labels 6. Coding 7. Codification | <ol style="list-style-type: none"> 1. Visit a warehouse and prepare a list of products along with the nature of products 2. Perform the packing, labeling, coding at a warehouse | 07 |
| 4. Store on shelves | <ol style="list-style-type: none"> 1. Meaning of pre-packing of goods 2. Organizational procedure of binning method 3. Storage system 4. Factors affecting the storage location 5. Storage system 6. Functions of storage system 7. Classification of goods for storage | <ol style="list-style-type: none"> 1. Demonstrate how to report about the storage location. 2. List out the functions of storage system 3. Prepare a chart on factors affecting the storage system | 08 |
| Total | | | 25 |

| Unit 4: Methods and Procedures of Binning | | | |
|--|--|--|--|
| Learning Outcome | Theory (10 hrs) | Practical (10 hrs) | Total Duration (20 Hrs) |
| 1. Demonstrate the binning methods | <ol style="list-style-type: none"> 1. Different types of binning methods 2. Various applications of binning methods 3. Factors affecting the selection of binning methods | <ol style="list-style-type: none"> 1. Demonstrate various applications of the binning methods in a given situation. 2. Prepare a chart on the factors affecting the selection of binning methods | 05 |
| 3. Recognise the binning procedures | <ol style="list-style-type: none"> 1. Binning Procedure followed at the time of binning | <ol style="list-style-type: none"> 1. Visit a warehouse in your area, and interact with the owner regarding binning and prepare a report in not more than 50 words. | 05 |
| 4. Managing the documentation process in binning | <ol style="list-style-type: none"> 1. Documents & their documentation process 2. Purpose of handling the documents. | <ol style="list-style-type: none"> 1. Prepare a list of various documents used at the time of binning. 2. Handle the documents to solve the different purposes | 05 |
| 5. Administer risks in binning | <ol style="list-style-type: none"> 2. Types of risks 3. Handling the risks at the binning procedure. | <ol style="list-style-type: none"> 1. Visit to a warehouse and handle risks in a given situation | 05 |
| Total | | | 20 |

CLASS 10

Part A: Employability Skills

| Sl. No. | Units | Duration (Hrs) |
|--------------|--|----------------|
| 1. | Communication Skills – II | 20 |
| 2. | Self-management Skills - II | 10 |
| 3. | Information and Communication Technology Skills – II | 20 |
| 4. | Entrepreneurial Skills – II | 15 |
| 5. | Green Skills – II | 10 |
| Total | | 75 |

| Unit 1: Communication Skills - II | | | |
|--|--|--|-------------------------|
| Learning Outcome | Theory (12 hrs) | Practical (08 hrs) | Total Duration (20 Hrs) |
| 1. Demonstrate knowledge of various methods of communication | 1. Methods of communication - Verbal - Non-verbal - Visual | 1. Writing pros and cons of written, verbal and non-verbal communication 2. Listing do's and don'ts for avoiding common body language mistakes | 05 |
| 3. Provide descriptive and specific feedback | 1. Communication cycle and importance of feedback 2. Meaning and importance of feedback 3. Descriptive feedback - written comments or conversations 4. Specific and non-specific feedback | 1. Constructing sentences for providing descriptive and specific feedback | 03 |
| 3. Apply measures to overcome barriers in communication | 1. Barriers to effective communication – types and factors 2. Measures to overcome barriers in effective communication | 1. Enlisting barriers to effective communication 2. Applying measures to overcome barriers in communication | 04 |
| 4. Apply principles of communication | 1. Principles of effective communication 2. 7 Cs of effective communication | 1. Constructing sentences that convey all facts required by the receiver 2. Expressing in a manner that shows respect to the receiver of the message 3. Exercises and games on applying 7Cs of effective | 03 |

| | | | |
|-------------------------------------|---|--|-----------|
| | | communication | |
| 5. Demonstrate basic writing skills | 2. Writing skills to the following: <ul style="list-style-type: none"> • Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph | 1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject | 05 |
| Total | | | 20 |

Unit 2: Self-management Skills - II

| Learning Outcome | Theory (05 hrs) | Practical (05 hrs) | Total Duration (10 Hrs) |
|--|---|--|-------------------------|
| 1. Apply stress management techniques | <ol style="list-style-type: none"> 1. Meaning and importance of stress management 2. Stress management techniques – physical exercise, yoga, meditation 3. Enjoying, going to vacations and holidays with family and friends 4. Taking nature walks | <ol style="list-style-type: none"> 1. Exercises on stress management techniques – yoga, meditation, physical exercises 2. Preparing a write-up on an essay on experiences during a holiday trip | 06 |
| 2. Demonstrate the ability to work independently | <ol style="list-style-type: none"> 1. Importance of the ability to work independently 2. Describe the types of self-awareness 3. Describe the meaning of self-motivation and self-regulation | <ol style="list-style-type: none"> 1. Demonstration on working independently 2. goals 3. Planning of an activity 4. Executing tasks in a specific period, with no help or directives 5. Demonstration on the qualities required for working independently | 04 |
| Total | | | 10 |

Unit 3: Information and Communication Technology Skills– II

| Learning Outcome | Theory (08 hrs) | Practical (12 hrs) | Total Duration (20 Hrs) |
|--|---|--|-------------------------|
| 1. Distinguish between different operating systems | <ol style="list-style-type: none"> 1. Classes of operating systems 2. Menu, icons and task bar on the desktop 3. File concept, file operations, file organization, directory structures, and file-system | <ol style="list-style-type: none"> 1. Identification of task bar, icons, menu, etc. 2. Demonstration and practicing of creating, renaming and deleting files and | 17 |

| | | | |
|--|---|---|-----------|
| | structures 4. Creating and managing files and folders | folders, saving files in folders and sub-folders, restoring files and folders from recycle bin | |
| 2. Apply basic skills for care and maintenance of computer | 1. Importance and need of care and maintenance of computer - Cleaning computer components - Preparing maintenance schedule - Protecting computer against viruses - Scanning and cleaning viruses and removing SPAM files, temporary files and folders | 1. Demonstration of the procedures to be followed for cleaning, care and maintenance of hardware and software | 03 |
| Total | | | 20 |

Unit 4: Entrepreneurial Skills – II

| Learning Outcome | Theory (06 hrs) | Practical (09 hrs) | Total Duration (15 Hrs) |
|--|---|--|-------------------------|
| 1. List the characteristics of successful entrepreneur | 1. Entrepreneurship and society 2. Qualities and functions of an entrepreneur 3. Role and importance of an entrepreneur 4. Myth about entrepreneurship 5. Entrepreneurship as a career option | 1. Writing a note on entrepreneurship as career option 2. Collecting success stories of first generation and local entrepreneurs 3. Listing the entrepreneurial qualities – analysis of strength and weaknesses 4. Group discussion of self-qualities that students feel are needed to become successful entrepreneur 5. Collect information and related data for a business 6. Make a plan in team for setting up a business | 15 |
| Total | | | 15 |

Unit 5: Green Skills – II

| Learning Outcome | Theory (07 hrs) | Practical (03 hrs) | Total Duration 10 Hrs |
|---------------------------------|------------------------------|--|-----------------------|
| 1. Demonstrate the knowledge of | 1. Definition of sustainable | 1. Identify the problem related to sustainable | |

| | | | |
|---|---|--|-----------|
| importance, problems and solutions related to sustainable development | <p>development</p> <ol style="list-style-type: none"> 2. Importance of sustainable development 3. Problems related to sustainable development | <p>development in the community</p> <ol style="list-style-type: none"> 2. Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage 3. Discussion on the responsibilities and benefits of environmental citizenship, including the conservation and protection of environmental values 4. Preparing models on rain water harvesting, drip / sprinkler irrigation, vermin compost, solar energy, solar cooker, etc. | 10 |
| Total | | | 10 |

Part B: Vocational Skills

| Sl. No. | Units | Duration (Hrs) |
|--------------|---|----------------|
| 1. | Verification of Binned goods | 25 |
| 2. | Operational and Documentation Procedure | 25 |
| 3. | Housekeeping Activities | 25 |
| 4. | Health, Safety and Security Measures | 20 |
| Total | | 95 |

| Unit 1: Verification of Binned Goods | | | |
|---|--|---|-------------------------|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25 Hrs) |
| 1. Check and Identify binned items for errors and steps of binning activities with GRN and ERP List | <ol style="list-style-type: none"> 1. Meaning of discrepancies in binned items 2. Types of discrepancies in binned item 3. Reasons of discrepancies in the binned items 4. Binning Activities 5. Steps in Post Binning activities | <ol style="list-style-type: none"> 1. Visit a large warehouse to learn about the types of discrepancies and its reasons of it. 2. Prepare a chart on binning activities. | 06 |
| 3. Report to superior about damages and location of binned product | <ol style="list-style-type: none"> 1. Meaning of damages 2. Types of damages 3. Damages for potential fixes 4. Notify superior about damages 5. Importance of identifying the damages in binned items 6. Identify the location of binned goods | <ol style="list-style-type: none"> 1. Visit to a warehouse for taking a note on identification of location of binned goods 2. Collect information from various sources on the location of binned goods and explain it with the help of PPT images and pictures. | 07 |
| 3. Inspect stacking procedure and counting and tallying as per checklist | <ol style="list-style-type: none"> 1. Meaning of stacking 2. Process of stacking 3. Advantages and disadvantages of stacking 4. Stock counting and tallying 5. Pre counting and tallying 6. Process for counting and tallying | <ol style="list-style-type: none"> 1. Visit the warehouse to understand the stacking process 2. Identify the Counting and tallying activity of the goods as per checklist 3. Prepare a report on counting and tallying the goods as per checklist | 06 |
| 4. Report status of inventory binned to supervisor checklist | <ol style="list-style-type: none"> 1. Report on status of inventory 2. Location of binned items 3. Difficulties in placing of binned items 4. Report on damage and | <ol style="list-style-type: none"> 1. Prepare a poster on status of inventory 2. Visit to a warehouse and write a report on difficulties in placing of binned items. | 06 |

| Unit 1: Verification of Binned Goods | | | |
|---|---|--|--------------------------------|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25 Hrs) |
| | accidents of binned items. 5. The common causes of discrepancies 6. Report of Discrepancies | 3. Visit to a warehouse for observation of discrepancies in warehouse. | |
| Total | | | 25 |

| Unit 2: Operational and Documentation Procedure | | | |
|--|---|--|--------------------------------|
| Learning Outcome | Theory (10 hrs) | Practical (15 hrs) | Total Duration (25 Hrs) |
| 1. Explain the material handling equipments and optimum utilization of space | 1. Material handling Equipments 2. Types of material handling equipments 3. Space Planning 4. Improving space utilization | 1. Visit the warehouse and understand the handling of various functional equipment's used at the time of binning process 2. Visit to a warehouse for observation of space utilization in warehouse for storage activities and procedures. | 07 |
| 2. Ensure Binning as per clients requirements | 1. Maintain binning as per clients requirement 2. Automating Processes 3. Optimal storage for location 4. Optimizing picking process 5. Implementing a comprehensive solution | 1. Visit to a warehouse ensuring binning as per clients requirements 2. | 05 |
| 3. Follow the instructions of supervisor on alternate | 1. Stock loss report 2. Inventory record keeping methods | 1. Visit to a warehouse to understand that what are the instructions are given by supervisor to Binner for alternates/solutions for discrepancies. | 06 |
| 4. Post Binning documentation : Forms and Reports | 1. Meaning and definition of Documentation 2. Documentation in Binning 3. Purposes of Documentation 4. Types of documentation | 1. Visit to a warehouse to understand the documentation of post binning activities process 2. Prepare a list of various documents used at the time of binning. | 07 |
| Total | | | 25 |

| Unit 3: Housekeeping Activities | | | |
|--|---|--|--|
| Learning outcome | Theory (10 hrs) | Practical (15 hrs) | Total duration (25 hrs) |
| 1. Prepare for housekeeping activities in warehouse | <ol style="list-style-type: none"> 1. Inspection of area for cleaning 2. Material required for cleaning <ul style="list-style-type: none"> - Risk - Time - Efficiency - Type of stain 3. Alternatives of cleaning like <ul style="list-style-type: none"> - Equipments - Material - Person 4. Sequence of cleaning 5. Why we sequence the cleaning process? | <ol style="list-style-type: none"> 1. Visit to a warehouse for observation of inspections of area for cleaning 1. Demonstrate how to check equipment 2. List out the sequence of cleaning | 08 |
| 2. Ensure the gathering and working of tools and equipments for housekeeping | <ol style="list-style-type: none"> 1. Equipments and tools for cleaning 2. Check the equipments 3. Report to responsible person about the cleaning 4. Signage and its importance 5. Type of signage with their uses during housekeeping activities 6. Need of ventilation 7. PPE and its needs | <ol style="list-style-type: none"> 1. Visit to a warehouse to understand that what types of tools and equipments used in housekeeping activities. 2. Prepare a chart on the types of signage used in housekeeping activities in the warehouse. 3. List out the equipments and tools of PPE. | 06 |
| 3. Carry housekeeping activities | <ol style="list-style-type: none"> 1. Methods of cleaning 2. Precautions take while performing housekeeping activities 3. Deal with accidental damages 4. Report to supervisor <ul style="list-style-type: none"> - About any difficulty - Additional cleaning - About special skills | <ol style="list-style-type: none"> 1. Visit to a warehouse to learn about the methods of cleaning 2. Demonstrate how to deal with accidental damages 3. Role play on reporting to supervisor about any difficulty arises during the task. | 06 |

| Unit 3: Housekeeping Activities | | | |
|--|---|---|--|
| Learning outcome | Theory (10 hrs) | Practical (15 hrs) | Total duration (25 hrs) |
| 4. Post housekeeping activities | <ol style="list-style-type: none"> 1. Check the floor 2. Maintain and store housekeeping equipments and supplies 3. Workplace procedure to deal with accidents damages 4. Causes of accidental damages 5. Inspection of area after cleaning 6. Return the equipments 7. Dispose as per manufacturer instructions <ul style="list-style-type: none"> - waste garnered - used solutions - unused solutions | <ol style="list-style-type: none"> 1. Visit to a warehouse to understand how to check housekeeping activities. 2. List out the causes of accidental damages 3. Prepare a list of various ways of disposing. | 05 |
| Total | | | 25 |
| Unit 4: Health, Safety and Security Measures | | | |
| Learning Outcome | Theory (18 hrs) | Practical (24 hrs) | Total Duration (42 Hrs) |
| 1. Monitor the Safety Regulations and Procedures in case of fire hazards and bio hazards | <ol style="list-style-type: none"> 1. Warehouse safety procedures 2. Workplace health and safety responsibilities. 3. Type of Accident and emergency in the warehouse 4. Techniques for safe handling 5. Reasons of occurrence of accidents | <ol style="list-style-type: none"> 1. Visit warehouse to understand the workplace safety procedure 2. Draw a chart and fill the given worksheet of safe handling 3. Draw a chart and fill the given worksheet of handling emergencies in case of leakage 4. Arrange the sequence of the pictures given in the worksheet in order to rescue for fire emergency | 12 |
| 2. Identify the personal protective equipment (PPE) | <ol style="list-style-type: none"> 1. Meaning of personal protective equipment (PPE) 2. Types of personal protective equipment (PPE) 3. Use of personal protective equipment (PPE) 4. Rules of warehouse floor regarding distance between personnel and area allotment | <ol style="list-style-type: none"> 1. Identify the personal protective equipment (PPE) and prepare a chart 2. Demonstrate the use of protective personal equipment in a given chart | 10 |

| Unit 4: Health, Safety and Security Measures | | | |
|---|--|---|--|
| Learning Outcome | Theory (18 hrs) | Practical (24 hrs) | Total Duration (42 Hrs) |
| 3. Follow the organization procedure with respect to security and material handling | <ol style="list-style-type: none"> 1. Security and material handling 2. Organizational procedure for accidents | <ol style="list-style-type: none"> 1. Demonstrate the organizational procedure of security 2. Visit a warehouse and observe the organizational procedure for material handling and prepare a report 3. Handle the organizational procedure for accidents | 10 |
| 4. Recognize and report unsafe conditions and conduct visual inspection | <ol style="list-style-type: none"> 1. Meaning of unsafe conditions in warehouse 2. Adhere to standardized operating procedure of warehouse 3. Visual inspection of activity area and equipments | <ol style="list-style-type: none"> 1. Visit a warehouse and identify the unsafe conditions in warehouse and prepare a report 2. Prepare a PPT presentation on standardized operating procedure of warehouse and submit 3. Prepare a chart of visual inspection at warehouse for general equipment safety, Lifting Equipment and Fork Lift Trucks, storage system and manual handling | 10 |
| Total | | | 42 |

6. ORGANISATION OF FIELD VISITS

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a warehouse and observe the following: Location, Site, Office building, bin, Entry & Exit gate, Store, Gate and fencing. During the visit, students should obtain the following information from the Owner /Supervisor / Manager of the warehouse:

1. Area under warehouse and its layout
2. Types of products entered in warehouse
3. Type of storage bins
4. Various equipment's used at warehouse
5. Documents used at the time of arrival and dispatch of goods.
6. Sale procedure
7. Manpower engaged
8. Total expenditure of warehouse
9. Total annual income
10. Profit/Loss (Annual)
11. Any other information

5. LIST OF EQUIPMENT AND MATERIALS

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

A. Training Material inside Lab

1. Charts of handling equipment's
2. Charts of marks and labels used on packages and boards
3. Samples of packaging material
4. Instruments used for opening packages and resealing packages like cutters and strapping machines, clips etc.
5. Unitization devices such as pallets and packing net.
6. Sample copies of warehouse register format used by binner for learning data entry
7. Sample formats as given in the student's handbook
8. Prepare the charts of organizational hierarchy and process charts (as included in the student's handbook)

B. Equipment's to be seen during Field Visit

1. Organizational Chart of the warehouse
2. Fork lifts
3. Reach trucks
4. Shelf designs
5. Shelf marks
6. Trolleys
7. Any other automatic and semi-automatic equipment used on site.
8. Safety and security equipment's on site
 - Fire extinguisher
 - Security cameras
 - LCD screens
 - Safety sign boards
 - Personal protective equipment's (PPE) like gloves, helmets, jackets, harness etc.
 - Locking systems
9. Housekeeping equipment's on site
 - Vacuum cleaner
 - Mops
 - Cleaning chemicals
 - Cleaning Robots
 - Air purifiers
 - Filtering machines
 - Spill Absorbents
10. Waste disposal equipment's such as scrap bins, recyclers, waste processing machines etc
11. Any other equipment mentioned in the student's manual can be sighted during the field visit

C. Teaching/Training Aids

1. Computer
2. LCD Projector
3. Projection Screen
4. White/Black Boards
5. Flip Charts

8. VOCATIONAL TEACHER'S/ TRAINER'S QUALIFICATION AND GUIDELINES

Qualification and other requirements for appointment of vocational teachers/trainers on contractual basis should be decided by the State/UT. The suggestive qualifications and minimum competencies for the vocational teacher should be as follows:

| Sl.No. | Qualification | Minimum Competencies | Age Limit |
|--------|--|--|---|
| 1. | Graduate or Diploma in Logistics Management, P.G. Diploma in Logistics Management with at least 50% marks and 1 year work or teaching experience in the area of logistics. Preference will be given to higher education with MBA (Logistics Management) and/or PG Diploma in Logistics Management. | <ul style="list-style-type: none"> • Effective communication skills (oral and written) • Basic computing skills. • Technical competencies (e.g. in areas such as marketing, sales promotion, store maintenance, marketing and merchandising etc.) | 18-37 years (as on Jan. 01 (year)) Age relaxation to be provided as per Govt. rules. |

Vocational Teachers/Trainers form the backbone of Vocational Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of vocational subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Vocational Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Vocational Teachers/Trainers, Educational Qualifications, Industry Experience, and Certification/Accreditation.

The State may engage Vocational Teachers/Trainers in schools approved under the component of Vocationalisation of Secondary and Higher Secondary Education under RMSA in the following ways:

- (i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC)

OR

- (ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through

the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

- * *The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organisations involved in education and training must meet in order to be accredited by competent bodies to provide government-funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.*

The educational qualifications required for being a Vocational Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers / trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. The Vocational Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Vocational Teachers/Trainers, the State should ensure that a standardized procedure for selection of Vocational Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
- (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Vocational Teachers/Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the Vocational Teachers/Trainers:

- (i) Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;
- (ii) Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- (iii) Make effective use of learning aids and ICT tools during the classroom sessions;
- (iv) Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;
- (v) Work with the institution's management to organise skill demonstrations, site visits, on-job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- (vi) Identify the weaknesses of students and assist them in up gradation of competency;

- (vii) Cater to different learning styles and level of ability of students;
- (viii) Assess the learning needs and abilities, when working with students with different abilities
- (ix) Identify any additional support the student may need and help to make special arrangements for that support;
- (x) Provide placement assistance

Assessment and evaluation of Vocational Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the Vocational Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the Vocational Teachers/Trainers. Following parameters may be considered during the appraisal process:

1. Participation in guidance and counselling activities conducted at Institutional, District and State level;
2. Adoption of innovative teaching and training methods;
3. Improvement in result of vocational students of Class X or Class XII;
4. Continuous up gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
5. Membership of professional society at District, State, Regional, National and International level;
6. Development of teaching-learning materials in the subject area;
7. Efforts made in developing linkages with the Industry/Establishments;
8. Efforts made towards involving the local community in Vocational Education
9. Publication of papers in National and International Journals;
10. Organisation of activities for promotion of vocational subjects;
11. Involvement in placement of students/student support services.

9. LIST OF CONTRIBUTORS

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