LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

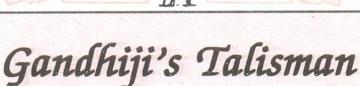
JOB ROLE: Land Transportation Associate (QUALIFICATION PACK: Ref. Id. LSC/Q1001)

SECTOR: Logistics

Grade 9 and 10



PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION
(a constituent unit of NCERT, under MHRD, Government of India)
Shyamla Hills, Bhopal- 462 002, M.P., India
http://www.psscive.ac.in



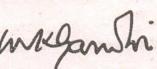
I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test:

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.

maganshi





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Logistics-Land Transportation Associate

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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. The curriculum has been developed for the vocational education program introduced under the Centrally Sponsored Scheme of Samagra Shiksha of the Ministry of Education (erstwhile, Ministry of Human Resource Development) and is aligned to the National Skills Qualifications Framework (NSQF). The curricula for vocational courses are being developed under the project approved by the Project Approval Board (PAB) of 'Samagra Shiksha' which is an overarching program for the school education sector extending from pre-school to Grade 12. The main purpose of the learning outcome-based curricula is to bring about improvement in the teaching-learning process and working competencies 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 **Land Transportation Associate**. The curriculum has been developed for the secondary students of Grade 9 and 10 and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualifications Framework (NSQF).

The curriculum aims to provide children with employability and vocational skills to support occupational mobility and lifelong learning. It will help students to acquire specific occupational skills that meet employers' immediate needs. The teaching process is to be performed through 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.

Dinesh Prasad Saklani

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 is 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 fulfill the growing aspirations of our youth and the demand for a skilled human resource, the Ministry of Education, (MoE), Government of India introduced the revised Centrally Sponsored Scheme of Vocationalisation of School Education under Samagra Shiksha 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 with the responsibility to develop learning outcome-based curricula, student workbooks, teacher handbooks, and e-learning materials for job roles in various sectors, with growth potential for employment.

The PSSCIVE firmly believes that the vocationalisation of education in the nation needs 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 fulfill the needs of society and the world of work. In order to honor the 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, policymakers, partner institutions, Vocational Education and Training experts, industry representatives, and teachers. The expert group through a series of consultations, working group meetings, and the use of reference materials develops the national curriculum.

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 the development of the curriculum. We are grateful to MoE and NCERT for the financial support and cooperation in realizing 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 Samagra Shiksha of MoE

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.

Deepak Paliwal

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 Samagra Shiksha and the officials of the Ministry of Education, Government of India for the financial support to the project for the development of curricula.

We are grateful to the Director of NCERT for his support and guidance. We also acknowledge the contributions of our colleagues at the Technical Support Group of MoE, and National Council for Vocational Education and Training (NCVET), the National Skill Development Corporation (NSDC), and Logistics Skill Council (LSC) for their academic support and cooperation in the development of Qualification file and curriculum.

We are thankful to the course coordinator Dr. Punnam Veeraiah Professor and Head of Department of Business and Commerce (DBC), Deeksha Chaurasia, Assistant Professor, Department of Business and Commerce (DBC) and the experts for their untiring efforts and contributions to the development of this learning outcome-based curriculum. The contribution made by Dr. Gayatri H, Head -Skilling in Schools & Academia Linkages, Logistics Sector Skill Council(LSC), in the development of the curriculum for domain and non-domain skills is duly acknowledged. The contributions made by Dr. Vinay Swarup Mehrotra, Professor and Head, Curriculum Development and Evaluation Centre (CDEC) in the development of the curriculum the employability skills are duly acknowledged.

We acknowledge the assistance provided by Sunita Koli, Computer Operator Grade III and Harendra Rajput in typing and composing of the material.

PSSCIVE Team

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1. COURSE OVERVIEW

COURSE TITLE: Logistics-Land Transportation Associate

Transport plays vital components of the distribution logistic and have a significant role in the supply chain at national and international level. Transport has recorded an extensive growth over the years both in spread of network and in output of the system.

Road transport is growing in importance as compared to other means of transport as a result of the subsequent reasons. Construction price of roads is way simpler than other. Roads will be simply inbuilt steep slopes and traverse mountains just like the Himalaya. It is additionally more helpful than other transport since it connects remote villages to the cities further. Road transportation is much more flexible than the other means. Therefore, it's very clear why road transport in India is considered more useful than other transport.

Connecting clients and drivers of Transport Services are mostly made possible by technology. Additionally, there has been a noticeable rise in production. In addition, technology aids in lowering costs and mistakes in the supply chain. To acquire a competitive edge in the market for transport services, today's logistics businesses are using cutting-edge innovations, including fleet management, cloud-based computing, and shipment tracking technologies.

When offering Transport Services, complete visibility ensures that service providers know the shipment's status from start to finish. Total consignment visibility is feasible with the implementation of cutting-edge technology. Another fantastic instance is when businesses can monitor the efficiency of moving trucks thanks to GPS installation. A logistics and transportation service provider may track shipments in real-time in this fashion. In the event of difficulties during travel, businesses can also fix them or find alternatives.

Consignments or shipments may now be tracked in real-time thanks to Artificial Intelligence, machine learning, the Internet of things and data analytics. Providers of logistics services assist businesses in gaining access to milestone-based tracking through specific client portals. Businesses may track consignment information, including the set delivery date, as it moves from one hub to another. The key benefits of milestone-based monitoring in the transportation industry are improved supply chain control and firmer collaboration.

The quickest and most economical path for a journey is determined using sophisticated route management algorithms. In the long run, this optimization is advantageous for the Transport Services sector in terms of cost, labour, and time savings. Widespread digitization has made contactless logistics possible. Key documentation like truck receipts and proofs of delivery are now automatically generated. Virtual gasoline cards have been created, particularly for the transportation industry. As a result, financial transactions are now more transparent. The e-toll system has successfully eradicated cash-based transactions. Additionally, the widespread use of electronic wallets, UPI-based payments, and online banking in Transport Services has changed the game.

The location-based service is known as geo-fencing. It designates a certain region or establishes a fictitious border. Every time there is movement inside the geo-fence, this service notifies the logistics business. The notifications that have been received in the form of alerts are milestone-based. The geo-fence may contain several touchpoints, including driver residences, corporate headquarters, client warehouses, etc. The main purpose is to assist the business in tracking the precise movements of the vehicles used in the transportation services industry.

The client's office, warehouse, and the car may all connect online to a single database thanks to system integration. Real-time information interchange is made easier by it. Many systems make it simple to retrieve this data.

The transportation sector tried to be as inventive as possible to address the challenging scenario even during the second wave of COVID-19. For this, they combined drones with technology to improve back-end networks.

In the transport services sector, an electronic toll collection is viewed as a game-changer in the quick passage of consignments. RFID is used in the toll-collecting system (Radio Frequency Identification). The mechanism subtracts the toll at each entrance after reading a distance away. This technique reduces the need for gasoline and delays at toll gates. Optimizing trip length and the number of trips a freight truck makes would be a component of smart transport in the transportation services industry. Improving the infrastructure will also aid in reducing the emissions caused by freight transit.

In a smarter India, widespread technology use in all areas is inevitable. This industry is not an exception. Modern start-ups are supported by state-of-the-art technology. It supports agility for ongoing innovation and client-centricity. Higher efficiency at cheaper costs is the result. Companies that provide transportation services may seek new business prospects due to such growth. Customers gain a lot of advantages from the digitization of transportation services. Customers may, for instance, follow their shipments in real time. Errors are less likely when activities are tracked and streamlined like this. Imagine the following scenario: in the not-too-distant future, robotic procedures may completely automate the logistics and transportation services sector.

Transportation of goods are important in the manufacturing, marketing and storage of goods. Transportation deals with getting products and services from one location to another. Thus, Transportation is a combination of activities performed in accordance with other logistics activities. Transportation is an essential activity for many business enterprises. It provides or improve access to different locations for individuals and businesses. Thus, transport facilitates are wider range of social and economic interactions. Raw material also needs to be stored so as to ensure uninterrupted supplies during a production cycle.

Land Transportation Associates are also known as transportation assistants. Land Transportation Associates are responsible for moving people and goods from one place to another. They may also be responsible for loading and unloading of goods in the vehicles, ensuring that everything is properly secured before the trip begins. After completion of this course the learner would be able to work as Land Transportation Associate to look after paper work. He/she will be able to work well with his/her team and achieve joint goals and also able to prioritize and execute tasks within scheduled time limits. The individual should be able to maintain high concentration levels throughout his/her shift.

COURSE OUTCOME: 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
- Execute consignment booking activities in the transportation
- Schedule vehicle for consignment movement based on type of consignment and delivery priority
- Perform route planning and resource scheduling activities
- Process gate entry and gate exit of vehicles at different transport destinations
- Schedule consignment pickup by deploying the right vehicle
- Track consignment movement to fund out the report status
- Comply to work place integrity, ethical and regulatory practices.
- Manage workplace for safe and healthy work environment by following compliance to regulatory and safety norms.
- Inspect invoices for correct application of GST under transportation process

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

COURSE LEVEL: This is an intermediate level course. On completion of this course, a student can take up diploma or degree level course.

COURSE DURATION: 400 hrs

Grade 9: 200 hrs Grade 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 Grade 9 and 10 opting for vocational subject along with general education subjects. The unit-wise distribution of hours and marks for Grade 9 is as follows:

The unit-wise distribution of hours and marks for Grade 9 is as follows:

	GRADE 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 -l	20			
	Unit 2: Self-management Skills -l	10			
	Unit 3: Information and Communication Technology Skills - I	20	10		
	Unit 4: Entrepreneurial Skills - I	15			
	Unit 5: Green Skills - I	10			
		75	10		
Part B	Vocational Skills				
	Unit 1: Introduction to Land Transportation	10	30		

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	Unit 2: Consignment Booking	25	
	Unit 3: Consignment Processing for Transportation	25	
	Unit 4: Route Planning and Vendor Coordination	20	
	Unit 5: Gate Operations in Transportation	15	
		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	n (CCE)	•
		05	10
	Total	200	100

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

	GRADE 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		
	Unit 2: Self-management Skills - II	10		
	Unit 3: Information and Communication Technology Skills - II	20	10	
	Unit 4: Entrepreneurial Skills - II	15		
	Unit 5: Green Skills - II	10		
		75	10	
Part B	Vocational Skills			
	Unit 1: Consignment Pickup and Tracking in Transportation	20		
	Unit 2: Verify Goods and Services Tax Application in Transportation	20	30	
	Unit 3: Consignment Consolidation for Transportation	20		
	Unit 4: Integrity and Ethics for Transportation	20		
	Unit 5: Health, Safety and Security Norms	15		
		95	30	
Part C	Practical Work			
	Practical Examination	06	15	
	Written Test	01	10	
	Viva Voce	03	10	
		10	35	

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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

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, photos of products prepared by students in relation to the unit of competency.

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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.

5. UNIT CONTENTS

GRADE 9

Part A: Employability Skills

S.No.	Units	Duration (hrs)
1.	Communication Skills – I	20
2.	Self-management Skills – I	10
3.	Information and Communication Technology Skills-I	20
4.	Entrepreneurship Skills – I	15
5.	Green Skills – I	10
	Total	75

UNIT 1: COMMUNICATION SKILLS – I				
Learning Outcomes	Theory (08 hrs)	Practical (12 hrs)	Duration (20 hrs)	
Demonstrate the knowledge of importance, elements and perspectives in communication	Introduction to communication process Importance of communication Ilements of communication Perspectives in communication Effective communication	 Role play on the communication process Group discussion on the importance of communication and factors affecting perspectives in communication Charts preparation on elements of communication Asking students to write statements exemplify the use of the 7Cs (i.e. Clear, Concise, Concrete, Correct, Coherent, Courteous and Complete) for effective communication 	02	

Demonstrate the knowledge of verbal communication	 Verbal communication Types of verbal communication Advantages and disadvantages of verbal communication Public speaking 	1. Role play of a phone conversation 2. Chart preparation on types of verbal communication 3. Group discussion on advantages and disadvantages of verbal communication 4. Delivering a speech and practicing public speaking by using 3P's	02
3. Demonstrate the knowledge of non-verbal communication	 Non-verbal communication Importance of non-verbal communication Types of non-verbal communication Visual communication 	Role play on non-verbal communication Group discussion and demonstration of Do's and Don'ts to avoid body language mistakes Group discussion on three methods of communication	02
4. Demonstrate the knowledge of basic writing skills	 Writing skills: Parts of speech Using capitals Punctuation Basic parts of speech 	1. Reading paragraphs and sentences and identifying parts of speech 2. Constructing and writing sentences by using parts of speech 3. Identifying nouns by guessing the name, place, animal, and thing	02
5. Describe the parts and types of sentences	 Writing skills: Sentences Parts of a sentence Types of objects Types of sentences – Active and Passive Types of sentences, according to their purpose Paragraphs 	1. Framing and writing sentences using direct and indirect objects 2. Writing a paragraph using active and passive voice 3. Writing different types of sentences (i.e., declarative, exclamatory, interrogative and imperative)	02

6. Demonstrate the	Pronunciation Basics	1. Pronouncing words	-
knowledge of	2. Speaking correctly	and identifying	
pronunciation	3. Phonetics	vowels, diphthongs	
basics	4. Types of sounds	and consonants	02
		2. Practicing the	
		pronunciation of words	
7. Demonstrate how	1. Greetings and	1. Role-play on Formal	
to greet and	Introductions	and informal	
introduce self	2. Greetings	greetings	
	3. Types of greetings	2. Role-play on	
	71 0 0	introducing	
	4. Introducing yourself and others	someone	02
	Onleis	3. Practice and	02
		discussion on how to	
		greet different	
8. Answer questions	Talking about self	people. 1. Practicing	
that others ask	2. Filling a form	introducing	
about you	2. 1 111119 G 101111	yourself and	
,		2. Practicing filling of	00
		forms	02
		3. Role-play on Self	
		Introduction	
9. Asking questions	1. Asking questions	1. Framing and	
according to a situation	2. Need for asking	writing questions (using Who, Where,	
SHOUHOH	questions	When, What, Why	
	3. Method for asking	and How)	
	questions	2. Framing and	
		writing questions	00
		(based on purpose	02
		of the question)	
		3. Discussing and	
		guessing the	
		personality using	
10. Use the correct	1 Asking questions	framed questions 1. Framing and writing	
question words to	Asking questions Types of guestions	open-ended and	
ask open-ended	2. Types of questions	close-ended	
and close-ended	3. Framing questions	questions.	
questions		2. Group practice on	02
		framing questions	UΖ
		3. Identifying open-	
		ended and	
		closed-ended questions.	
Total		9003110113.	20
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UNIT 2: SELF-MANAGEMENT SKILLS – I				
Learning Outcome	Theory (07 hrs)	Practical (03 hrs)	Duration (10 hrs)	
Describe the meaning and importance of self-management	 Introduction to self-management and its components Self-awareness Self-confidence Self-motivation Positive thinking Self-control Problem solving Personal hygiene and grooming Team work Time management Goal setting 	 Group discussion on self-management skills Performing activities to know how much aware are you about yourself. Chart preparation on components of self-management 	01	
2. Identifying strength and weakness analysis	 Identifying strength and weakness Knowing yourself Strength and Weakness analysis Difference between interests and abilities 	 Group discussion on aim and goal in life Perform a strength and weakness analysis Group discussion on interests and abilities 	01	
3. Build self- confidence	 Self-confidence Qualities of self-confident people Building self-confidence 	Role play on building self-confidence Performing activities on building confidence through positive words	02	
4. Building the concept on positive thinking	 Positive thinking Positive thinking and its importance How to keep your thinking positive? 	 Story-telling Role-play on following the class rules Practicing saying positive words Making a list of steps involved in self-reflection) on how you will follow positive attitude practices Home activity on 	02	

5. Describe the concept and aspects of personal hygiene	helping others, community service and social work 1. Personal hygiene 2. Three steps of personal hygiene	02
6. Follow the guidelines for dressing and personal grooming	 Grooming Grooming and its importance Guidelines for dressing and grooming – clothes, hair, face Role play on dressing and grooming Self-reflection on dressing and grooming well 	02
Total		10

UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS - I			
Learning Outcome	Theory (06 hrs)	Practical (14 hrs)	Duration (20 hrs)
1. Explain the role of Information and Communication Technology (ICT) in day-to-day life and the workplace	 Introduction to Information and Communication Technology (ICT) ICT at workplace ICT at home 	 Group discussion on past, present, and future use of ICT Preparations of posters on applications of ICT 	02
Differentiate between the ICT tools and use of mobile apps	 ICT tools smartphones and tablets I Smartphones Tablets TV and Radio Application or apps 	Performing activities to get familiar with mobile devices	02
3. Differentiate between smartphones and tablets	 ICT tools -smartphone and tablets II Mobile device layout Basic features of a mobile device Home screen of mobile device Basic gestures used 	Performing activities to get familiar with the mobile device – use and applications of mobile devices	02
4. Describe the	1. Parts of a computer and	1. Chart preparation	

$\overline{}$		1				
	parts of		peripherals		on components of	
	computer and	2.	Parts of a computer	_	a computer	02
	the computer	3.	Input devices	2.	Group activity on	
	peripherals	4.	Output devices		connecting	
		5.	Peripherals devices and		devices to a	
			their functions		computer	
		6.	Central Processing Unit			
			(CPU)			
		7.	Understanding Random			
			Access Memory (RAM)			
			and Read Only Memory			
			(ROM)			
		8.	Motherboard			
		9.	Ports and connections			
5.	Demonstrate	1.	Basic computer operations	1.	. Group activity on	
	basic computer	2.	Computer hardware and		use of computer	
	operations	۷.	software	2.	Group practice	
		3.	Starting a computer		on using the	
			Log in and log out		keyboard	
		4.	•			02
		5.	Shutting down computer			
		6.	Using the keyboard			
		7.	Using a mouse	<u> </u>		
6.	Perform basic	1.	Performing Basic file	1.	• •	
	file computer operations		operations		on creating a file.	
	operations	2.	Need to perform basic file			
			operations.			00
		3.	Files and folders -creating			02
			a file and using text editor			
	Danasalasta	1	Ubuntu	-		
7.	Demonstrate	1.	Communication and Networking -Basics of	1.	Group discussion	
	the knowledge of internet and		Networking -Basics of Internet		on the uses of the internet	
	networking	2.	Use of the Internet			
	HOTWOINING	3.	Connecting to the Internet			
		0.	 Types of connection 			02
			Bandwidth			\ \frac{\frac}\frac{\frac}\fint}}}}}{\frac}\frac{\frac{\frac}\frac{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\frac{\frac}\frac{\frac{\frac
			 Internet browser 			
8.	Perform internet	1.	Communication and	1.	. Group practice	
	browsing		Networking - Internet		on web browsing	
			Browsing			
		2.	World Wide Web			20
		3.	Web page			02
		4.	Web browsers			
				1		

9. Apply the	1. Communication and 1. Group discuss	ion
knowledge of	9	nail
communication	to E-Mail and	its
networking	2. How does the E-mail work? advantages	
	3. Email Id or address	01
	4. Advantages of E-mail	
10. Create an Email	1. Communication and 1. Group pract	
account	Networking – Creating an on creating of	
	E-mail account operating an 2. Creating an E-mail	e-
	account mail account	0.1
	3. Steps to open an E-mail	01
	account on Gmail	
11. Write an Email	1. Communication and 1. Group pract	rice
	Networking – Writing an E- on writing an	
		vith
	2. Writing an E-mail attachments	
	3. Attaching a file to an E-	01
	mail	
	4. Managing folders	
12. Reply an Email	1. Communication and 1. Group pract	ice
	Networking – Receiving on receiving o	and
	and Replying to an E-mail replying to an	e-
	2. Receiving Email mail.	
	3. Replying to an Email	01
	4. Forwarding Email	
	5. Deleting Email	
Total	1	20

UNIT 4: ENTREPRENEURSHIP SKILLS – I					
Learning Outcome	Theory (06 hrs)	Practical (09 hrs)	Duration (15 hrs)		
Describe the concept of Entrepreneurshi p skills	 What is Entrepreneurship? Entrepreneurship Enterprise 	Group activity on guessing the Entrepreneur	04		
2. Describe the role of entrepreneurshi p	 Role of Entrepreneurship Economic development Social development Improved standard of living Optimal use of resources More benefits at lower prices - products and services at competitive prices 	 Group discussion on "A world without Entrepreneurs" Role-play on roles of entrepreneurship 	03		

3. Describe the qualities of a successful entrepreneur	 Qualities of a successful entrepreneur Patience Positivity Hardworking Confidence Open to trial and error Role-play on appearing for an interview Group activity on interactions with entrepreneurs 	
4. State the characteristics of entrepreneurshi p	 Distinguishing characteristics of entrepreneurship and wage employment Characteristics of entrepreneurship Wage employment Benefits entrepreneurship Discussion on advantages of entrepreneurship over wage employment Benefits entrepreneurship 	
5. Identify the type of business activity	 Types of business activities Product business Service business Hybrid business Group activity on identifying different types of products and services 	
6. Differentiate between the product, service, and hybrid businesses	 Product, Service, and Hybrid Businesses Types of product-based business Manufacturing businesses Trade businesses 	
7. Describe the entrepreneurshi p development process	 Entrepreneurship Development Process Steps of starting a business Idea generation Getting money and material Understanding customer needs Improving product/service Group activity on Make-and-Sell business 	01
Total		15

UNIT 5: GREEN SKILLS – I					
Learning Outcome	Theory (07 hrs)	Practical (03 hrs)	Duration (10 hrs)		
Demonstrate the knowledge of society and environment	 Society and Environment Natural resources Renewable and Non-renewable resources 	Group activity on listing the factors influencing the environment	05		

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2. Describe the meaning and importance of conserving natural resources	 Types of pollutions Climate change Harmful radiation Natural disaster Saving the environment: What can you do? Reduce, reuse and recycle Actions for saving the environment Conserving natural resources Soil conservation Water conservation Energy conservation Food conservation 	Group activity on listing the steps one can take to save the environment Group discussion on various ways of conserving natural resources	02
3. Describe the meaning and scope of sustainable development and green economy	 Forest conservation Sustainable Development and Green Economy Sustainable Development Sustainable Development Goals (SDGs) Green growth Green economy Components of green economy Skill development for the green economy Green skills Green jobs Green projects 	Group discussion on importance of green skills Poster making on importance of green economy	03

Part B: Vocational Skills

S.No.	Units	Duration (Hrs)
1.	Unit 1: Introduction to Land Transportation	10
2.	Unit 2: Consignment Booking for Transportation	25
3.	Unit 3: Consignment Processing for Transportation	25
4.	Unit 4: Route Planning and Vendor Coordination	20
5.	Unit 5: Gate Operations in Transportation	15
	Total	95

Unit 1: INTRODUC	Unit 1: INTRODUCTION TO LAND TRANSPORTATION				
Learning Outcome	Theory (05hrs)	Practical (05hrs)	Duration (10 Hrs)		
Classify the components of supply chain and logistics sector	 Logistics, supply chain- Meaning, Function Importance Sub-sectors in logistics Components of Supply chain 	 Prepare a chart showing basic functions and requirements of supply chain and logistics Visit a transport agency to note down the activities performed by them Classify the components of Supply chain and logistic Sector 4. List the sub-sectors in logistics 	2		
Demonstrate various activities in land transportation	Meaning of land transportation Major activities that are performed in land transportation, warehouse, port yard, land, ship, air transportation and transport yard	Draw a chart contains distinguish between the various activities performed under land transportation Perform various activities in transport yard	2		
3. Explain duties and responsibilities of land transportation associate (LTA)	Meaning of land transportation associate Duties & responsibilities of transportation associate	 Spell out the skill required for land transportation associate (LTA) Identify the duties of LTA List the responsibilities of LTA 	2		
4. Describe the various MHEs and equipment used in land transportation (LT)	 Meaning, Importance and function of MHE in land transportation Various equipment used in land transportation Equipment used in land transportation 	Prepare a chart showing various equipment used in land transportation Identify various functioning of MHE's in land transportation Demonstrate the operational mechanism of MHE in LT	2		
5. Identify the documents required for goods transportation in the transport agency	 Documents to be carried out by person for transportation Procedure of goods transportation Statutory documents for travelling the vehicles in land transportation 	 List the documents required for goods transportation Prepare a chart showing process of goods transportation. Inspect the statutory documents required under land transportation 	2		
Total			10		

Unit 2: CONSIGN	Unit 2: CONSIGNMENT BOOKING FOR TRANSPORTATION				
Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25hrs)		
1. Collect order details and the correspondin g documentati on for order booking 1. Collect order details and the correspondin g documentati on for order documentati or	 Definition of Sales order, Sales order process and procedure Important things to be kept in mind in order confirmation email Process of order booking Documents required for order booking Difficulties in booking customer orders Process of inbound and outbound transportation Use of computers for electronic documentation& maintain customer account Transport the goods using company's fleet Pricing strategy by transportation company 	 Students must do role-play and learn how to obtain order requirement from customer through email or telephone calls Prepare PPT and suggest to transport the goods using company's fleet or to tie up with other transporters Find out the market rates depending on the destination and the load for a competitive pricing Identify and select the suitable documents required booking the order Practice on computers for electronic documentation and maintain customer's accounts Find out the market rates depending upon the destinations Recognize post confirmation of order by the customer and inform to the supervisor 	7		
2. Identify the type of vehicles required for transportation products	1. Meaning and type of vehicles required for intercity transportation in India 2. Importance of truck routing and reporting 3. Factors for smooth movement of vehicles on road 4. Nature of goods which are loading in transportation 5. Space management in	 Finalize the loading of goods to be a part of Full Truck Load (FTL) or Less than Truck Load (LTL) based on goods type and client's requirement Visit a warehouse and check if the vehicle meets the regulatory requirement in terms of width, height and length of the vehicle with respect to number of axles Identify the factors affecting for smooth 	6		

regulatory compliance of the vehicle to the transportation requirements 2. Overall picture of the freight transport industry 3. Importance of alternate or contingency planning 4. Importance of staying in challenges related to to the transportation 2. Overall picture of the freight transport industry 3. Importance of staying in vehicle required and check for loading arrangements in the vehicle based on the nature of the goods space required, etc. and update details in system 2. Identify variou challenges in land transportation 3. Select suitable solution	3. Estimating the cost of transportation by interfacing with transportation agencies	the vehicles 6. Facilities in vehicles for loading various types of goods 7. Loading of goods (FTL, LTL) 1. Concept and types of transport Cost 2. Definition of transportation agency 3. Factors affecting transportation costs 4. Negotiation with the customer 5. Compare the rates with different transport companies 6. Advance payment mechanism	movement of vehicles 4. Classify the goods in various nature and arrange the suitable space for them 5. Arrange the refrigerator facilities in the vehicles as per the perishable nature 1. Prepare a report on how to facilitate advance payment to transporter as per agreement 2. List out the transportation companies in India through internet 3. Calculate the transportation cost by using different transport factors involved 4. Conduct role-play on negotiate cost while confirmation of booking 5. Make a chart which contains rates of different transport companies	6
the driver 5. Different geographies and distances 6. Contingency geographies and distances 6. Contingency geographies and distances 6. Contingency geographies and distances 5. Make decisions with	regulatory compliance of the vehicle to the transportation requirements	challenges related to transportation 2. Overall picture of the freight transport industry 3. Importance of alternate or contingency planning 4. Importance of staying in connection with the driver 5. Different geographies and distances 6. Contingency planning 7. Essential requirements for	check for loading arrangements in the vehicle based on the nature of the goods, space required, etc. and update details in system 2. Identify various challenges in land transportation 3. Select suitable solutions to overcome the challenges faced in LT 4. Find out overall picture of the freight charges for different products which we transport 5. Make decisions with suitable transportation	25

Unit 3: CONSIGNMENT PROCESSING FOR TRANSPORTATION				
Learning Outcome	Theory	Practical	Duration	
1. Arrange the mandatory documentation in LT	1. Meaning and procedure of Transportation 2. Process of tracking consignment 3. Role of consignment tracking executive in verifying the route plan of the truck 4. Importance of truck routing and reporting 5. Importance of usage of GPS for enhanced tracking 6. GST: Introduction & permits for dispatching vehicles	1. Maintain a file to prepare transit insurance forms and goods and services tax (GST) permits for dispatching vehicles and agreement sheet to be given at destination along with consignment 2. Arrange the papers like road permit are available with the transporter and coordinate with the customer 3. Plan and execute truck routing and reporting 4. Track and verify the route plan of the vehicles 5. Find out the usefulness of global positioning system (GPS) in the tracking of goods or vehicles in the transit	(25hrs)	
2. Managing changes in volume, packaging, destination and other elements during the course of transportation	Concept of dispatching of goods Delivery and consignment tracking Agreement sheet for vehicle dispatch Essential paper's required for transportation	1. Check periodically dispatching of goods (if there are any changes in the quantity, packaging, destination etc.) 2. Demonstrate how to fill lorry receipt (LR) to provide 3. Dispatch the vehicles with agreement sheet 4. Prepare and check papers like road permit, driver license, insurance paper, etc., are available with the transporter	5	
Record the details in (enterprise resource planning)	Definition for a consignment and consignment	Check information on vehicle movement for ease	5	

ERP for tracking of consignment and vehicle	tracking 2. Importance of consignment tracking 3. Importance and usage of computer systems in the consignment tracking (functioning of ERP systems and their operations) 4. Electronic documentation and information (with format)	of tracking 2. Schedule a consignment and track through ERP 3. Adopt the procedure for booking truck and transporting consignment 4. Prepare a file with suitable format and necessary documents for tracking of consignment in LT	
4. Record the delivery of goods and acknowledgement of receipt	1. Meaning, uses and process of Goods received note 2. Meaning and format of acknowledgement of receipt and organization procedure to be followed 3. Challenges: Booking order 4. Agreement sheet, acknowledgement receipt and invoice	1. Maintain a file of post confirmation of order by the customer, print performa invoices with consignment details and communicate the same 2. Prepare a file and mention the signed agreement sheet and inbound documentation from the incoming transport and fill all the required forms 3. Delivery of goods and collect receipt of acknowledgement, close the order in the system and raise invoice 4. Enlist difficulties faced in booking and delivery of customer order	5
5. Describe the process of inbound documentation	1. Meaning and types of inbound documentation 2. Steps involved in preparing documents 3. Do's and don'ts while preparing documents 4. Process of inbound and outbound transport	1. Role-play on the signed agreement sheet and inbound documentation from the incoming transport and fill all the required forms for inbound transports 2. Prepare the invoice proforma for processing of inbound	5

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	documentation 3. Identify the documents required for inbound and outbound transportation	
Total		25

Learning Outcome	Theory	Practical	Duration
	(8 Hrs)	(12 Hrs)	(20 Hrs)
Describe the details of transporter	 Meaning of point of origin point of destination type of goods, pickup date and time, delivery date and time volume of goods vehicle capacity vehicle traffic constraint Meaning of transporter with its types Federal and state law pertaining to software 	1. Collect details from transporter regarding point of origin, point of destination, type of goods, pickup date and time, delivery date and time, volume of goods, vehicle capacity, vehicle traffic constraint and transporter details and paste it in your scarp book. 2. Prepare a chart showing federal and state laws pertaining to software	4
2. Design the route planning through software	 Meaning, importance and parts of computer Meaning, features and benefits of route planning software/route optimization software and it's equipment Things that can help you in route planning 	1. Prepare a chart showing the usage of computer and associated equipment 2. Calculate the pickup and delivery sequence for optimal time, allocation of loads, vehicle capacity by entering the details in route planning software 3. Perform activity by filling shipment details in the software	4
3. Identify alternate routes for times of emergency	Route Planning for truck drivers and fleets Definition and objectives of trip	Plan optimized routes for multiple depots ensuring cost efficiency across the whole operation	4

	assignment	2.	Plan daily truck	
	3. Meaning of alternate		coverage, driver and	
	routes and approach		trip assignment	
	of alternate route plan	3.	Identify the various	
	4. Impacts of planned		tolls, rest stops, driver	
	and unplanned		shift change, vehicle	
	events benefits		relay, refueling of	
			vehicle etc.	
		4.	Design alternate	
			route plan in	
			emergency situation	
4. Demonstrate the	Meaning of route plan, route schooluling.	1.	Communicate route information with staff	
route plan, schedule and	route scheduling			
necessary	2. Service standards in	2.	Identify alternate routes to maintain	
requirements to all	case of contingency requirements		service standards in	
stakeholders	· ·		case of contingency	
	3. Planning of routes and network		requirements like	
			inclement weather,	
	4. Communicate route		natural calamities	
	plan to customer		etc.	4
	5. Consignment	3.	Communicate to the	
	schedule		customer on the	
			finalized route plan	
			and coordinate with	
			other internal	
			departments	
			regarding the route	
			plan for consignment	
			schedule	
5. Arrange for	1. Responsibilities of a	1.	Ensure the assigned	
necessary	transport owner and a		vehicle is in good	
requirements for	driver		condition to operate	
the trip,	2. Duties and		as per the planned	
consignment	responsibility of		schedule, if not	
pickup and	cleaner		coordinate with	
delivery	3. Definition and process		maintenance	
	of consignment		department or	
	pickup process	_	transporter	
	4. Difference between	2.	Coordinate with	
	the consignment		transportation	
	pickup process and		supervisor for	4
	consignment return		required drivers and	4
	process.		cleaner's allocation	
	5. Treatment of		for the planned	
	damages and	_	schedule	
	mismatch of products	3.	Make necessary	
			arrangements for	
			consignment pickup/ delivery with the	
			assigned vehicle	
			driver or transporter	
			•	
		4.	Prepare a report regarding damages,	
į			mismatch of	

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	products and report to the supervisor		
Total		20	

Un	it 5: GATE OPERAT	IONS IN TRANSPORTATION		
	Learning Outcome	Theory (5 hrs)	Practical (10hrs)	Duration (15Hrs)
1.	Prepare schedule for loading and unloading of goods	 Concept of loading and unloading & characteristics of the warehouse dispatch Strategies for optimizing the goods dispatch process Freight forwarding companies 	 Design daily plan for loading or unloading and assign the timing Plan for the bay area based on priority and type of goods to be loaded/unloaded to get the internal approval on the availability Prepare a list of freight forwarding companies Develop strategies for optimizing the goods dispatch process 	3
2.	Inspect vehicle details and driver details for compliance to regulatory and consignment requirements	 Meaning and benefits of consignment Terminology: Vehicle registration number, vehicle insurance number, container number, release container PIN, equipment delivery order (EDO), delivery challan (DC) Essential detail required of vehicle Working of ERP to generate gate exit pass 	1. Collect details about vehicle, driver, vehicle registration number, vehicle insurance number, container number, release container PIN, equipment delivery order (EDO), goods to be loaded/ unloaded, delivery challan (DC) to prepare the entry pass 2. Enter the vehicle details, loaded goods information and other information in ERP to generate gate exit pass	3
3.	Apply necessary precautions for hazardous goods transportation	 Meaning of hazardous goods Precautions and procedures for 	Role-play on how to obtain vehicle permit from the transporter to	3

© PSS CENTRAL INSTITUTE OF VOCAITONAL EDUCAITON, BHOPAL transporting hazardous carry non-

		transporting hazardous materials 3. Documents for dangerous and hazardous goods	carry non- normative goods in case of oversized cargo, dangerous goods declaration/ certificate in case of hazardous material 2. Prepare list of documents required for transportation of dangerous and hazardous goods
4.	Describe the customs verification process and legal clearance	 Meaning of custom duty and inspection Procedure for clearance of import and export goods Instruct the driver to coordinate with the security Legal procedure against gate entry 	1. Check that all containers are gated out after completion of necessary customs and legal procedures against gate entry and coordinate with the security to instruct the driver on the bay number 2. Ensure that customs verification procedures are completed, and the goods/containers are sealed, if required 3. Role play by showing the security procedure to be followed for import and export of goods
5.	Communicate entry pass and exit pass through ERP/TMS and record plan details in ERP/TMS	 Meaning and benefits of gate entry management E-R diagram of gate pass management system Procedure of gate pass management system Meaning, benefits, features and main providers of ERP/TMS, 	1. Role-play on how to communicate the gate exit pass details to security through ERP/TMS 2. Design E-R 3 diagram of gate pass management system 3. Write request

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	Letter for Gate Entry, Gate Pass Create entry in the enterprise resource planning (ERP)/ transport management system (TMS) based on the planned bay and timing of the vehicle	
Total	15	

GRADE 10

Part A - Employability Skills

S.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)	Duration (20 hrs)
Demonstrate the knowledge of various methods of communication	 Methods of communication Communication process and elements 	 Role-play on communication process Group discussion on the effects of elements of communication cycle. 	05
2. Describe the types of verbal communication	 Verbal communication Types of verbal communication Advantages and disadvantages of Verbal communication Mastering Verbal communication 	1. Role-play of a telephonic conversation 2. Chart preparation on types of verbal communication 3. Group discussion on the advantages and disadvantages of verbal communication 4. Group activity on delivering a speech and practicing public speaking.	02

3. Demonstrate the knowledge of non-verbal communication	Non-verbal communication Importance of Non-verbal communication Types of non-verbal communication Visual communication	Role play on non-verbal communication Group discussion and practice on how to avoid body language mistakes Group discussion on three methods of communication	02
4. Describe the communication cycle and importance of feedback	 Communication cycle and importance of feedback Feedback Types of feedback Importance of feedback 	 Role play on providing feedback Group activity on constructive feedback 	02
5. Identify the barriers to effective communication	 Barriers to Effective communication Effective communication Barriers to effective communication Physical barriers Linguistic barrier Interpersonal barriers Organizational barriers Culture barriers Ways to overcome barriers to effective communication 	 Role play on barriers to effective communication Group activity on overcoming barriers to effective communication Chart preparation on barriers to effective communication 	04
6. Demonstrate the knowledge of parts of speech	 Writing skills – Parts of speech Capitalization Punctuations Basics of parts of speech Supporting parts of speech Article Conjunctions Prepositions Interjections 	 Reading paragraph and sentences and identifying parts of speech Group activity on sentence construction Identifying nouns by guessing the name, place, animal, or thing 	03
7. Write sentences	Writing Skills - Sentences Parts of sentence	Making sentences using direct and indirect objects	

	 3. Types of objects 4. Types of sentences Active Passive 5. Paragraphs 	2. Writing a paragraph using active and passive voice 3. Framing different types of sentences (i.e., declarative, exclamatory, interrogative and imperative)	02
Total			20

Learning Outcome	Theory (05 hrs)	Practical (05 hrs)	Duration (10 hrs)
1. Apply stress management techniques	 Stress management Stress and Stress management techniques Management technique Ability to work independently Emotional intelligence 	 Role Play on avoiding stressful situation Activity on listing stressful situations and discussing the stress management techniques like yoga, deep breathing exercises etc. 	02
2. Identify strengths and weaknesses of self	 Self-Awareness – Strength and Weakness Analysis Knowing yourself Strength and weakness analysis Techniques for identifying strengths and weaknesses Difference between interests and abilities 	 Group discussion on aim and goal in life Perform a strength and weakness analysis Group discussion on interests and abilities 	02
3. Demonstrate the knowledge of self-motivation	 Self-Motivation Types of motivation Qualities of self-motivated people Building self-motivation 	Group discussion on staying motivated Activity on listing the ways to motivate oneself	02

4. Set SMART goals	 Self-Regulation – Goal Setting Goals and Setting SMART goals How to set goals 	Group activity on setting SMART goals Writing long- term and short-term goals	
To Down and the state of the	SpecificMeasurableAchievableRealisticTime bound	3. Activity on listing the ways to surely set SMART goals	02
5. Demonstrate the knowledge of time management	 Self-Regulation - Time Management Time management and its importance Example and non-example of time management Four steps for effective time management Organise Prioritise Control Track Tips for practicing the four steps of effective time management 	 Preparing a list of activities to practice time management Discussion on how to manage time to reach school on time 	02
Total			10

UNIT 3: INFORMATION	UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS – II			
Learning Outcome	Theory (08 hrs)	Practical (12 hrs)	Duration (20 hrs)	
Perform basic computer operations	 Basics computer operations Computer hardware and software Starting a computer Shutting down a computer Using keyboard Using a mouse Roll over or hover Point and click 	Demonstration on use of computers Group activity on using the keyboard	12	

	Drag and drop Double click	
2. Apply basic file operations	 Performing basic file operations Basic File Operations Files and folders Creating a file Creating a folder 	of r 02
3. Demonstrate computer care and maintenance	Computer care and Maintenance Importance of care and maintenance of computers Basic tips for taking care of devices Cleaning computer devices Preparing maintenance schedule for computers Taking backup data Scanning and cleaning viruses Removing SPAM files	
4. Describe the importance of maintaining computer security and privacy	 Computer security and privacy Computer security deals with protecting computer Reasons for security breach Threats to computer Protecting your data 1. Group activity preparing infographic chain on computer security privacy privacy	an nart uter and 03
Total		20

UNIT 4: ENTREPRENEURIAL SKILLS – II				
Learning Outcome	Theory (06 hrs)	Practical (09 hrs)	Duration (15 hrs)	
Describe the meaning of entrepreneurship	 Entrepreneurship and society Activities of entrepreneurs: Fulfil customer needs Use local materials Help society Create job 	Group work on finding the problems in school campus and turning them into business	05	

	Share wealthLower price product	opportunities	
2. Identify the qualities and functions of an entrepreneur	 Qualities and functions of an entrepreneur Qualities of an entrepreneur 	Activity on self-assessment of entrepreneurial qualities Brainstorming on solving a problem in their area Taking an interview of an entrepreneur	03
3. Describe the myths and realities about entrepreneurship	Misconceptions and myths about entrepreneurship	 Group activity on identifying everyday heroes Activity on interviewing the entrepreneurs Group activity on making items and selling to someone 	04
4. Describe entrepreneurship as a career option	 Entrepreneurship as a career option Meaning of career Ways of earning a living Self-employment Wage employment Entrepreneur career process Enter Survive Grow 	1. Brainstorming on entrepreneurship as a life option 2. Group discussion on the power of entrepreneurship	03
Total			15

UNIT 5: GREEN SKILLS – II				
Learning Outcome	Theory	Practical	Duration	
leaning objective	(07 hrs)	(03 hrs)	(10 hrs)	
1. Demonstrate the	 Sustainable Development 	1. Group activity		
knowledge of	2. Importance of sustainable	on creating		
green skills	development	garden in the		
	3. Problems related to	school or		

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Total	Protect life below water Protect life on land		10
2. Describe the role of self in sustainable development	 Our role in sustainable development Our role towards Sustainable Development Quality education Clean water and sanitation Affordable and clean energy Decent work and economic growth Reducing inequalities Creating sustainable cities and communities Responsible consumers and producers 	Group discussion on conservation and protection of environment Group activity on organizing an art project using waste	05
	sustainable development 4. Sustainable development Goals 5. Sustainable development initiatives 6. Sustainable process	planting tree saplings 2. Group discussion on "How to prevent wastage"	05

Part B-Vocational Skills

S.No.	Units	Duration (Hrs)
1.	Unit 1: Consignment Pickup and Tracking in Transportation	20
2.	Unit 2: Verify Goods and Services Tax Application in Transportation	20
3.	Unit 3: Consignment Consolidation for Transportation	20
4.	Unit 4: Integrity and Ethics for Transportation	20
5.	Unit 5: Health, Safety and Security Norms	15
	Total	95

Unit1: CONSIGNMENT PICKUP AND TRACKING IN TRANSPORTATION				
Learning Outcome	Theory (05 hrs)	Practical (15 hrs)	Duration (20Hrs)	
Schedule consignment pickup by	Definition of consignment pickup and	Contact with the transport	4	

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coordinating with transport companies and customers	tracking system 2. Importance and usage of computer systems in the consignment tracking in transportation 3. Consignment process and consolidation opportunities	companies, check for availability and book vehicle as per requirement for pickup goods 2. Take follow up of existing truck bookings that have already been scheduled through computer 3. Schedule a plan for cargo movement for pick up the goods Identify the steps in consignment
2. Plan alternate vehicle in coordination with Executive in-case of exigencies	 Definition of alternate vehicle Steps in the emergency action plan Material movement policy, Safety and delivery timelines 	process and consolidation for pick up the goods 1. Contact with the transport companies and check in case of non-availability of trucks planned as per client's
	4. Alternate plan for vehicle	requirement 2. Escalate to the executive to alter the plan in terms of pricing or vehicle type without any deviation in terms of safety and delivery timelines 3. Enlist action plan to be taken during emergency for pick up the

		goods	
3. Inspect the vehicle for availability of all mandatory documentation for perishable goods handling	 Meaning of perishable goods Factors keep in mind while transporting perishable goods Documents required for perishable goods Data maintenance, recording and handling 	 Check for regulatory compliance of the vehicle in terms of hygiene, functionality of the refrigerated vehicle, etc. Identify and note down if any truck that has been reported with any issues/delays in the system and communicate to the supervisor for alternative arrangements Identify the factors which should influence perishable goods Select suitable documents required to pick up the goods Maintain the records regarding pick up the goods 	4
4. Communicate to customer in case of any change in vehicle, pickup plan and schedule of operations	 Meaning of communication, consignment pick up Process of consignment Changes in route or consignment paperwork Implications of poor performance, improper documentation and high error rate 	1. Keep the customer posted on the developments on periodical basis 2. Contact with the customer and the transporter for consignment pick up schedule	4

movement and compliance to schedule	 Tracking and tracing of consignments and vehicles Escalation procedures and updating information on tracking consignment Updating consignment information in the system 	are loaded/unloade d against the lorry receipt (LR) details in the ERP. 2. Interact with customer and transporter to receive clarification or update in the ERP system in case of delays 3. Prepare a chart showing steps in escalation procedure 4. Update the tracking of consignment information in the computer system	
7. Review Executive, and Customer in case of documentation problems, accidents, GPS failure and any other case of exigencies	 Tracking system Differences between manual tracking and automated tracking Ease and comfortability in using GPS tracking Reasons for delay in consignment delivery 	 Remind drivers of route changes/special weather conditions Track the location of each consignment with GPS and find out reasons for delays if any and update the information in the system at regular interval Generate reports for each consignment on delivery, reasons for delays if any, etc. Draw a chart showing the difference 	4

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	between manual tracking and automated tracking	
Total		20

Unit 2: VERIFY GOODS AND SERVICES TAX APPLICATION IN TRANSPORTATION			
Learning Outcome	Theory (05hrs)	Practical (15hrs)	Duration (20Hrs)
Differentiate location of service recipient and place of supply of services in Goods and Services Tax (GST) application	 Concept and applicability of GST Place of Supply of service under GST GST Location of supplier and recipient 	 Identify location of service recipient and place of supply of services Prepare a chart showing financial concepts such as calculation of interest and taxes in land transportation 	4
2. Determine the classification of the transaction to apply the right CGST, IGST, and SGST/UTGST	1. GST tax classification 2. Proposed new scheme of classification of services 3. Guidelines for dealing with receipts and payments	 Identify proper classification of the transaction (i.e. Intra-State or Inter-state) a Determine the applicable GST: Central Goods and Services Tax (CGST), Integrated Goods and Services Tax (IGST), State Goods and Services Tax (SGST), Union Goods and Services Tax (UTGST) List out exempted products under GST 	4
3. Detail the rules and regulation in applying and reversing GST	 GST rules and regulations Reverse charge mechanism in GST Methods of collection and payments with GST Rule 42 & 43 CGST 	1. Identify if GST is payable under reverse charge in case the Service provider is unregistered party 2. Apply rules 42 and 43 of CGST under input tax credit reversal 3. Enlist the methods of collection and payments of GST	4

4. Demonstrate the applicability of GST based on documentation	online process and advantage 2. Documents required for GST registration 3. Applicable rate of GST (based on tax rate) 4. Numerical based on SAC/HSN 5. Reverse charge mechanism (charge in case the Service provider is unregistered party)	1. Obtain name, address, GST Identification Number (GSTIN), Permanent account number (PAN), email id of service/ shipment provider and recipient 2. Find out the description service, Service accounting code (SAC) / Harmonized System of Nomenclature (HSN) code, (UIN) for multilateral entity 3. Calculate taxable value considering applicable rate of GST based on SAC/HSN 4. Apply the GST is payable under reverse charge in case the Service provider is unregistered party	4
5. Inspect invoice for availability of mandatory information relating to GST application	details: Essential information 2. Information 2 required in a GST invoice	 Check for relevant notification in case of exempt clients Verify the invoices for all mandatory particulars and applicable GST Prepare list of challans used in GST 	4
Total			20

Unit 3: CONSIGNMENT CONSOLIDATION FOR TRANSPORTATION			
Learning Outcome	Theory (05 hrs)	Practical (15 hrs)	Duration (20 Hrs)
Explain component of truck schedule and dispatch schedule	Consignment	Obtain the truck schedule and goods dispatch schedule planned for the day Make judgement while utilizing the space while consolidating	3

	plan 2. Loading plan & steps to create a stakeholder communication plan 3. Relationship between transport coordinator and warehouse in charge	ensure truck consolidation plan is as per original shipment plan 2. Identify the steps to create stakeholder communication plan	
5. Inspect compliance of loaded goods to the loading plan	 Meaning of loaded goods to the loading plan Importance of cargo plan when loading cargo Inspection procedure 	 List out post arrangement of goods at loading bay, inspect that the goods are arranged as per loading plan Inspect the loaded goods in the vehicle for compliance to loading plan 	2
6. Check appropriate lashing and cushioning of goods in the truck	1. Concept of lashing and cushioning of goods 2. Importance of safety measures for transportation 3. Procedure followed while booking trucks to pick up and transport consignments	 Demonstrate that the goods are lashed appropriately, and cushioning are provided to avoid damage during transit Design the procedure followed while booking trucks to pick up and transport consignments 	2
7. Arrange for replacement of damaged goods during handling and quarantine of damaged goods	Meaning of quarantine goods and damaged goods Procedure for handling damaged goods Problems faced for replacement of damaged goods under	1. Identify the problems faced for replacement of damaged goods during handling 2. Arrange for replacement or quarantine of any damaged goods during loading or arrangement of goods in the demarcated area and inform the supervisor accordingly	2

	consignment consolidation	Adapt the procedure for handling damaged goods	
8. Record dispatch and delay details in ERP	 Meaning of dispatch and delay of goods Ways that can reduce the delays in production with ERP Procedure to update on ERP with respect to goods Reasons for delay in dispatch of goods Operating systems related to MIS transports 	 Coordinate with dispatch supervisor to arrange for appropriate material handling equipment (MHE) to load the goods in the vehicle as per loading plan Update ERP periodically with respect to goods that have been successfully dispatched Record reasons for delay or pending dispatch of goods Report to the supervisor about the delays 	4
Total			20

Unit 4: INTEGRITY AND ETHICS FOR TRANSPORTATION				
Learning Outcome	earning Outcome Theory Practical (05hrs) (15hrs)		Duration (20 Hrs)	
Describe the concepts of integrity, ethics and document integrity and ethics violations	1. Concept of integrity, ethics, difference between ethical and unethical 2. Types of integrity violations 3. Integrity and ethics policy 4. Principles of code of ethics and business ethics	1. Prepare PPT on how to refrain from indulging in corrupt practices 2. Check for regulatory documentation and compliances for the shop floor as per information from the supervisor 3. Find out the reasons and prepare a report on violations of code of ethics	5	

Detail the various regulatory requirements related to logistics industry	 Meaning of logistics ethics Top code of ethics for successful logistics providers Business ethics policy, Use personal protective equipment (PPEs) in accordance to regulatory requirements Utilization of company's funds, property Ethics and unethics in logistic industry 	 Find out the mechanism to avoid acceptance of cash or kind from vendors for support or contract negotiation Take precautions to avoid using company's funds, property or resources for undertaking personal activities Perform activities considering the regulatory requirements Consult supervisor or senior management when in situations that may require Differentiate between ethical and unethical activities in logistic industry 	5
3. Explain data and information security practices	 Importance of information security Procedures to be followed for information security Security measures to overcome data breach SOP for handling of different types of dangerous goods 	1. Prepare project report on how to protect data and information related to business or commercial decisions 2. List out how to protect customer's information and ensure it is not misused 3. Demonstrate the handling of different types of dangerous goods 4. Make a chart regarding regulatory violations	5

4. Comply to regulatory requirements and corrupt practices	 Making inroads on corruption in the transport sector through control and prevention Corruption in transport s ector Meaning code of conduct and Transport etiquette Compliance with the code of conduct 	1. Demonstrate dealings with customers and colleagues 2. Practice the dress up and conduct in a professional manner 3. Communicate with clients and stakeholders in a soft and polite manner 4. Follow etiquettes in accordance to the	5
		place 5. Find out the reasons for Corruption in transport sector	
Total			20

Unit 5: HEALTH, SAFE	Unit 5: HEALTH, SAFETY AND SECURITY NORMS				
Learning Outcome	Theory (05hrs)	Practical (10 hrs)	Duration (15 Hrs)		
1. Monitor health, safety and security procedures in port terminals, container freight stations (CFS) and inland container depots (ICD)	 Meaning and distinction between ICD and CFS Safety measures in container terminals' should implement Basics of occupational safety and health administration (OSHA) Importance of information security, components of Health safety plan Workplace security procedure 	 Adapt safety processes in different location (cargo loading area, ramp operation area, etc.) with reference to area of operation Visit to loading dock/bay and check if cargo has passed security checks and report in case of any violation Read case study related to OSHA (Occupational Safety and Health Administration) Group discussion on Health safety plan List out workplace security procedure to 	3		

		be followed	
2. Implement 5S at workplace of transportation	 Meaning and use the 5S Methodology Before and after 5S Implementation 5s Implementation Plan 	Draw a chart containing the implementation of 5S at workplace	1
3. Inspect area and equipment, for appropriate and safe conditions	 Meaning of safe condition Inspection and maintenance of work equipment Training and competence for use of equipment's Concept of stacking and walkway free from greece Standard material handling procedure Essential certification required for equipment's Safety and security procedures related tags, labels Meaning and types of signage Cargo security management 	 List out 10 different products and note down its maximum height of the stacking items or boxes in meters Case study/ Group discussion on accidents happened when walkway is free from grease/oil Perform mock drill in situation of emergency like fire alarms, water sprinklers and smoke detectors Prepare a chart showing standard material handling procedure Perform role-play on holding ladders, platforms and hand rails to be in a sound and safe condition Enlist various loading instruments and certificates required for it Draw a chart showing list of safety and security procedures related tags, labels Design a chart showing types of signage which can be placed in the cargo 	3

		9. Demonstrate how cargo has passed security checks and report in case of any violation	
4. Identify unsafe working conditions	 Importance of voluntary compliances to safe procedures Documents to be checked for better compliance. Importance of PPE 	 Visit to loading dock/bay and recognize unsafe conditions and safety practices at the workplace and prepare a report. Demonstrate PPE such as goggles, ear plugs, helmet, mask, shoes, etc. as applicable in the cargo movement area 	2
5. Inspect adherence to standard operating procedures (SOP) while handling dangerous and hazardous goods	 Meaning/Acronyms- Dangerous good Requirements/Policies/R egulations and Training and Safety Precautions Standard driving practice Shipping Procedures 	1. Students need to follow necessary Standard Operating Procedure (SOP) and precautions while handling dangerous and hazardous goods while visiting and monitoring 2. Role play by following standard driving practice to ensure safety of life and material 3. Adopt policies regarding training and safety precautions	2
6. Implement standard protocol in case of emergency situations, accidents, and breach of safety	 Definition and causes of accidents General safety tips and prevention Accident reporting and investigation Periodical preventive health check ups Protocols to be followed in emergency situation 	1. Handle and check if emergency fire alarms, water sprinklers and smoke detectors are installed at all places 2. Prepare chart on organizational protocol to deploy action in case of signs of any emergency situation or accident or breach of safety 3. Undertake periodical preventive health	2

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		check ups	
7. Explain the escalation matrix for reporting deviation	 Meaning of escalation matrix and reporting structure Channels of communication in organization Realize the escalation matrix in the organization structure Right way of escalating things to the right person in the structure 	 Recognize how an escalation matrix works in land transportation Classify different types of escalation Describe how do you write an escalation matrix Show why should one opt for an escalation 	2
Total			15

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 loading dock or loading bay and observe the following: Location, Site, Office building, bin, Entry & Exit gate, Store, Gate, fencing, Bumpers, Dock leveller, Dock lift, Dock seals or dock shelters, Truck or vehicle restraint system, Dock light, Loading dock software, Side shift. During the visit, students should obtain the following information from the Owner /Supervisor / Manager of the loading dock:

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

7. 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

SL. No.	Name of Item	Quantity	Approximate Cost
1.	Physical balance(01mg) / Counter Balance (01gm sensitivity)	1	2400
2.	Digital moisture meter calibrated for all the commodities to be stored/ handled	1	15000
3.	Sieve Set	1	2500
4.	Scoops (different sizes)	2 sets	3000
5.	Forceps and brushes	2 sets	1000
6.	Weight Box (1mg to 200gm)	1 set	2000
7.	Enamel plates with smooth white surface (30 cm dia with raised rims)	10	3000
8.	Sample bags-polythene and cloth	As per Requirement	1000
9.	Parkhi (Bag trier)	As per Requirement	800
10.	Sample seal	1	200
11.	Magnifying glass (magnification 10X)	2	3200
12.	Petri dish (80X70 mm)	As per Requirement	90
13.	Measuring Cylinders (5ml to 50ml) graduated	5	1700
14.	Recommended Pesticides (for prophylactic and curative treatments) and rat control	As per requirement	800
15.	Rat cages (wonder traps)	As per requirement	200
16.	Thermoplastic fumigationcovers (IS 13217:1991)	As per requirement	300
17.	Multilayered cross laminated fumigation sheets/covers (IS 14611:1998)	As per requirement	800
18.	Foot / Hand sprayers	As per requirement	3000
19.	Sand snakes	As per requirement	8000
20.	Adhesive tape	As per requirement	80
21.	Tarpaulin	2	2000
22.	Ladder	1	800
23.	First Aid box	1	800
24.	Fire extinguishers	As prescribed inAnnexure V	800

25.	Fire buckets	As prescribed	250
		inAnnexure V	
26.	Platform Scales	As per need	450
27.	Gum boots	As per	600
28.	Goggles	requirement As per	500
20.		requirement	
29.	Gas Mask (full vision facemask) & Canister for use with ALP	As per requirement	600
30.	Polythene film	As per	700
		requirement	
31.	Bamboo mats	As per requirement	500
32.	Wooden crates/polycrates	As per requirement	300
33.	Hectolitre weightapparatus	1	15000
34.	Sample Divider	1	15000
35.	Vernier Caliper (manual/Digital)	1	16000
36.	Thermo-hygrometer	2	2000
37.	Glass wares (Beakers 500 ml, Funnels, Flasks conical 200 ml & 500 ml)	Two each	100
38.	Filter papers	As per requirement	600
39.	Chemical reagents: (i) Methylene Blue solution (ii) Dilute hydrochloric acid (iii) distilled water (for determination of de- husked grain in rice)	As per requirement	5000
40.	Glass tubes	10	600
41.	Metal Probe (12 ft longfor introducing ALP tablets)	As per requirement	750
42.	Phosphine Alert personalmonitor	1	18000
43.	Phosphine gas Monitor	1	8000
44.	Tool Box (for minor repairsof pesticide application equipment)	As per requirement	14000
45.	Dust Mask	As per requirement	5000
46.	Aprons	As per requirement	500
47.	Resuscitator	1	800
48.	Dummy Truck	1	30000

B. Equipment to be seen during Field Visit

- 1. Sample documents
 - o Picklist, BOM,
 - o Transportation/Truck Schedules,
 - o Inventory record sheet

- 2. Sample SOP documents
 - o MHE Forklift,
 - o Stackers,
 - o reach trucks,
 - o HOPT, BOPT etc.
- 3. IT Systems
 - o Barcode
 - o scanners,
 - o Wi-Fi systems
- 4. Material Handling Equipment
 - o HOPT,
 - o BOPT,
 - Stacker,
 - o ladder,
 - o Forklift etc
- 5. Pallets, Totes, Storage Bins
- 6. Shrink wraps, Dunnage
- 7. Storage racks
- 8. Basic 5s charts
 - o Sample Inventory tracking sheet,
 - o Sample Inventory records,
 - o Requisition forms,
 - o Incident reports etc
- 9. First Aid Kit
- 10. Safety and security equipments on site
 - o Fire extinguisher
 - Security cameras
 - o LCD screens
 - Safety sign boards
 - Personal protective equipments (PPE) like gloves, helmets, ear plugs, jackets, harness, boiler suit etc.
 - Locking systems
- 11. Housekeeping equipments on site
 - o Vacuum cleaner
 - Mops
 - o Cleaning chemicals
 - Cleaning Robots
 - Air purifiers
 - Filtering machines
 - Spill Absorbents
- 12. Waste disposal equipment's such as scrap bins, recyclers, waste processing machines etc
- 13. 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. TEACHER'S/TRAINER'S QUALIFICATION

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:

SI. No.	Qualification	Minimum Competencies	Age Limit
1.	Graduate (B. Com/BBA) Or Three-years Diploma in Logistics Management, P.G. Diploma in Logistics Management with at least 55% marks And One-year work or teaching experience in the area of logistics. Preference given to higher	 Effective communication skills (oral and written) Basic computing skills. Technical competencies (e.g. in areas such as marketing, sales promotion, store maintenance, 	18-37 years (as on Jan. 01 (year)) Age relaxation to be provided as per Govt. rules.
	education with MBA/M. Com (Logistics Management) and PG Diploma in Logistics Management.	marketing and merchandising etc.)	

Vocational Teachers/Trainers form the backbone of Vocational Education being imparted as an integral part of *Samagra Shiksha* (SS). 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

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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 Grade X or Grade 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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