# LEARNING OUTCOME BASED **VOCATIONAL CURRICULUM**

Job Role: Paper Mache Products Artisan

QP Code: HCS/Q4401 Grade: XI & XII

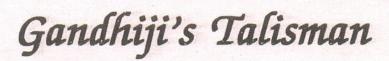




# **PSS Central Institute of Vocational Education**

(a constituent unit of National Council of Educational Research and Training (NCERT) under Ministry of Education, Government of India)

Shyamla Hills, Bhopal - 462002, Madhya Pradesh, INDIA



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.

maganin





# LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

Handicrafts and Carpet Sector – Paper Mache Products Artisan

December, 2025

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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 preschool 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 **Paper Mache Products Artisan** (**HCS/Q4401**). The curriculum has been developed for the secondary students of Grade 11 and 12 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* at 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**

**O**n 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) and the National Skill Development Corporation (NSDC), for their academic support and cooperation in the development of Qualification file and curriculum.

We are thankful to the course coordinator Dr. Pinki Khanna Professor, Head of Department of Home Science and Hospitality Management (DHSHM), Amit Chotrani, Assistant Professor (Contractual), Department of Home Science and Hospitality Management (DHSHM) and the experts for their untiring efforts and contributions to the development of this learning outcome-based curriculum. 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 Mr. Ashish Kathane, DTP operator (Contractual), PSSCIVE in layout, design, typing and composing of the material.

**PSSCIVE Team** 

# **CONTENTS**

S. No.			Title	Page No.	
1.	Foreword				
2.	Preface	Preface			
3.	Acknowledger	nents		(iv)	
4.	Course Overv	iew		1	
5.	Scheme of Un	its		2	
6.	Teaching/Tra	ining Activ	ities	4	
7.	Assessment a	nd Certific	ation	5	
			GRADE 11		
		Part A	Employability Skills		
			Unit 1: Communication Skills – III		
			Unit 2: Self-management Skills – III		
			Unit 3: Information and Communication Technology Skills – III		
			Unit 4: Entrepreneurial Skills – III		
			Unit 5: Green Skills – III		
8.	Unit Content	Part B	Vocational Skills		
	Content		Unit 1: Handicraft Industry in India		
			Unit 2: Fundamentals of Design		
			Unit 3: Tools and Materials		
			Unit 4: Production Process of Paper Mache Products		
			Unit 5: Design and Development of Different Paper Mache Products		
			Unit 6: Health, Hazards, and Safety Measures at the Workplace		

S. No.		Page No.		
		GRADE 12		
	Part A	Employability Skills		
		Unit 1: Communication Skills – IV		
		Unit 2: Self-management Skills – IV		
		Unit 3: Information and Communication Technology Skills – IV		
		Unit 4: Entrepreneurial Skills – IV		
		Unit 5: Green Skills – IV		
	Part B	Vocational Skills		
		Unit 1: Current Scenario, Employability and Entrepreneurship in Paper Mache Craft		
		Unit 2: Design Thinking, Innovation and Aesthetics		
		Unit 3: Design and Development for different Paper Mache Products		
		Unit 4: Sustainability for Paper Mache Products		
		Unit 5: Effective Teamwork at Workplace		
		Unit 6: Complying with Workplace Requirements		
9.	Organization of Field	Visits		
10.	List of Equipment ar	List of Equipment and Materials		
11.	Vocational Teacher's	Vocational Teacher's / Trainer's Qualification and Guidelines		
12.	List of Contributors			

#### 1. COURSE OVERVIEW

#### **COURSE TITLE: Handicrafts and Carpet Sector – Paper Mache Products** Artisan

A Paper Mache Products Artisan is a job-role associated with the Handicrafts and Carpet Sector. The primary responsibility of an artisan is to produce a diversified range of paper mache products of definite shape and size as per design specifications, market demand, and customer requirements. Produce paper mache products with artistic finesse and fine finishing at a rate which maintains work flow and meets production targets. Identify faults in the product components and maintain report of production progress to the supervisor.

For all such products to be popularized in the national and international market, they need to be produced as per customer's given standards and quality benchmarks. Hence, the job holder should know how to produce quality paper mache crafted products as per the market demand and set standards while maintaining aesthetic excellence and durability.

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

- Apply effective oral and written communication skills to interact with people and customers
- Demonstrate self-management and time management skills
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities
- Demonstrate knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection
- Demonstrate proficiency in Information and Communication Technology (ICT) skills
- Technical and Vocational Skills:
- Familiarize with Handicraft and Carpet Industry in India
- Identify and understand the roles and responsibilities of a Paper Mache Products Artisan
- Understand the current scenario and career opportunities in paper mache craft
- Understand design thinking, innovation principles, and their application in craft
- Recognize design elements and principles essential for creating aesthetically pleasing
- Identify commonly used tools, equipment, and materials used in paper mache craft
- Carry out preparation of paper pulp and natural adhesives
- Identify and understand paper mache product components and tasks required to assemble them
- Perform sculpting techniques (with and without armature) to achieve final products as per requirement
- Perform mold and casting techniques using one-piece and two-piece molds for varied product types
- Carry out finishing, painting, waterproofing, and storage of paper mache products
- Contribute to achieve quality in paper mache products making
- Develop and apply quality control measures for paper mache products
- Demonstrate various paper mache product making techniques including Gond art, masks, furniture add-ons, and decorative items
- Understand sustainability principles and eco-friendly practices in paper mache craft
- Promote sustainable development goals (SDGs) through eco-friendly product making
- Demonstrate effective teamwork, accountability, and commitment at workplace

- Apply workplace safety, health, and security measures
- Comply with workplace requirements and emergency management protocols
- Describe the importance and practice of safety and health measures in the industry
- Explain strategies for preventing hazards at workplace
- Explain measures to control hazards and manage environmental safety
- Report damage or faults in material and assembly to the responsible person
- Maintain workplace organization and promote positive work culture

**COURSE REQUIREMENTS:** The learner should have a basic knowledge of design, art, and craft

**COURSE LEVEL:** This is a course for grade XI and XII. On completion of this course, a student can take up a higher level course in the area of Handicrafts and Carpets.

**COURSE DURATION: 600 Hrs** 

Class 11: 300 Hrs Class 12: 300 Hrs

Total: 600 Hrs

# 2. SCHEME OF UNITS

**T**his course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Grade 11 and 12 opting for vocational subject along with general education subjects. The unit-wise distribution of hours and marks for grade 11 is as follows:

GRADE 11					
	Units	No. of Hours for Theory and Practical 300	Max. Marks for Theory and Practical100		
	Employability Skills				
	Unit 1: Communication Skills - III	25			
	Unit 2: Self-management Skills – III	25			
Part A	Unit 3: Information and Communication Technology Skills – III	20	10		
	Unit 4: Entrepreneurial Skills – III	25			
	Unit 5: Green Skills – III	15			
	Total	110	10		
	Vocational Skills	_ <del>,</del>			
Part B	Unit 1: Handicraft Industry in India	25			
Part B	Unit 2: Fundamentals of Design	35			
	Unit 3: Tools and Materials	35			

	Unit 4: Production Process of Paper Mache Products	30	
	Unit 5: Design and Development of Different Paper Mache Products	20	
	Unit 6: Health, Hazards, and Safety Measures at the Workplace	20	
	Total	165	40
	Practical Work		
D	Practical Examination	06	15
Part C	Written Test	01	10
	Viva Voce	03	10
	Total	10	35
	Project Work/Field Visit		·
	Practical File/Student Portfolio	10	10
Part D	Viva Voce	05	05
	Total	15	15
	Grand Total	300	100

The unit-wise distribution of hours and marks for grade 12 is as follows:

GRADE 12					
	Units	No. of Hours for Theory and Practical 300	Max. Marks for Theory and Practical 100		
	Employability Skills				
	Unit 1: Communication Skills – IV	25			
	Unit 2: Self-management Skills – IV	25			
Part A	Unit 3: Information and Communication Technology Skills – IV	20	10		
	Unit 4: Entrepreneurial Skills – IV	25			
	Unit 5: Green Skills – IV	15			
	Total	110	10		
	Vocational Skills				
Part B	Unit 1: Current Scenario, Employability and Entrepreneurship in Paper Mache Craft	25			
	Unit 2: Design Thinking, Innovation and Aesthetics	25			

	Unit 3: Design and Development for different Paper Mache Products	35	
	Unit 4: Sustainability for Paper Mache Products	35	
	Unit 5: Effective Teamwork at Workplace	25	
	Unit 6: Complying with Workplace Requirements	20	
	Total	165	40
	Practical Work		
David O	Practical Examination	06	15
Part C	Written Test	01	10
	Viva Voce	03	10
	Total	10	35
	Project Work/Field Visit		
Part D	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	Total	15	15
	Grand Total	300	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, jute fabric samples 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

**U**pon 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, and 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: 03 Hrs Max. Mark: 40

		No.	of Questic	ons	
S. No.	Typology of Question	Very Short Answer (1 mark)	Short Answer (2 Marks)	Long Answer (3 Marks)	Marks
1.	Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information)	3	2	2	13
2.	Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	2	3	2	14
3.	Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, private an example, or solve a problem)	0	2	1	07
4.	High Order Thinking Skills – (Analysis & Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources)	0	2	0	04
5.	Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	0	1	0	02
	Total	5x1=5	10x2=20	5x3=15	40 (20 questions)

#### SKILL ASSESSMENT (PRACTICAL)

Assessment of skills by the students should be done by the assessors/examiners on the basis of practical demonstration of skills by the candidate, using a competency checklist. The competency checklist should be developed as per the National Occupation Standards (NOSs)

given in the Qualification Pack for the Job Role to bring about necessary consistency in the quality of assessment across different sectors and Institutions.

The student has to demonstrate competency against the performance criteria defined in the National Occupation Standards and the assessment will indicate that they are 'competent', or are 'not yet competent'. The assessors assessing the skills of the students should possess a current experience in the industry and should have undergone an effective training in assessment principles and practices. The Sector Skill Councils should ensure that the assessors are provided with the training on the assessment of competencies.

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

**Project Work** (individual or group project) is a great way to assess the practical skills on a certain time period or timeline. Project work should be given on the basis of the capability of the individual to perform the tasks or activities involved in the project. Projects should be discussed in the class and the teacher should periodically monitor the progress of the project and provide feedback for improvement and innovation.

Field visits should be organised as part of the project work. Field visits can be followed by a small-group work/project work. When the class returns from the field visit, each group might be asked to use the information that they have gathered to prepare presentations or reports of their observations. Project work should be assessed on the basis of practical file or student portfolio.

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

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

# 5. UNIT CONTENTS

# GRADE 11

#### PART A: EMPLOYABILITY SKILLS

S. No.	Units	Duration (hrs)
1.	Communication Skills- III	25
2.	Self-management Skills – III	25
3.	Information and Communication Technology Skills – III	20

4.	Entrepreneurial Skills – III	25	
5.	Green Skills – III	15	
	Total		

# **UNIT 1: COMMUNICATION SKILLS - III**

Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
Demonstrate     knowledge of     communication	<ol> <li>Introduction to communication process</li> <li>Importance of communication</li> <li>Elements of communication</li> <li>Perspectives in communication</li> <li>Effective communication</li> </ol>	<ol> <li>Role play on the communication process</li> <li>Group discussion on the importance of communication and factors affecting perspectives in communication</li> <li>Charts preparation on elements of communication</li> <li>Classroom discussion on the 7Cs (i.e. Clear, Concise, Concrete, Correct, Coherent, Courteous and Complete) for effective communication</li> </ol>	03
Demonstrate     verbal     communication	Verbal     communication     Public Speaking	<ol> <li>Role-play of a phone conversation.</li> <li>Group activity on delivering a speech and practicing public speaking</li> </ol>	02
3. Demonstrate non- verbal communication	Importance of nonverbal communication     Types of nonverbal communication     Visual communication	Role-play on non-verbal communication     Group exercise and discussion on Do's and Don'ts to avoid body language mistakes     Group activity on methods of communication	02
4. Demonstrate speech using correct pronunciation	<ol> <li>Pronunciation basics</li> <li>Speaking properly</li> <li>Phonetics</li> </ol>	Group activities on practicing pronunciation	01

	4. Types of sounds		
5. Apply an assertive communication style	Important     communication     styles     Assertive     communication     Advantages of     assertive     communication     Practicing     assertive     communication	<ol> <li>Group discussion on communication styles</li> <li>Group discussion on observing and sharing communication styles</li> </ol>	03
6. Demonstrate the knowledge of saying no	<ol> <li>Steps for saying 'No'</li> <li>Connecting words</li> </ol>	Group discussion on how to say 'No'	02
7. Identify and use parts of speech in writing	<ol> <li>Capitalisation</li> <li>Punctuation</li> <li>Basic parts of speech</li> <li>Supporting parts of speech</li> </ol>	<ol> <li>Group activity on identifying parts of speech</li> <li>Writing a paragraph with punctuation marks</li> <li>Group activity on constructing sentences</li> <li>Group activity on identifying parts of speech</li> </ol>	03
8. Write correct sentences and paragraphs	<ol> <li>Parts of a sentence</li> <li>Types of object</li> <li>Types of sentences</li> <li>Paragraph</li> </ol>	<ol> <li>Activity on framing sentences</li> <li>Activity on active and passive voice</li> <li>Assignment on writing different types of sentences</li> </ol>	02
9. Communicate with people	Greetings     Introducing self     and others	<ol> <li>Role-play on formal and informal greetings</li> <li>Role-play on introducing someone</li> <li>Practice and group discussion on how to greet different people?</li> </ol>	02
10. Introduce yourself to others and write about oneself	Talking about self     Filling a form	<ol> <li>Practicing self- introduction and filling up forms</li> <li>Practicing self- introduction to others</li> </ol>	01

11. Develop questioning skill	Main types of questions     Forming closed and open-ended questions	Practice exercise on forming questions     Group activity on framing questions	01	
12. Communicate information about family to others	<ol> <li>Names of relatives</li> <li>Relations</li> </ol>	<ol> <li>Practice talking about family</li> <li>Role-play on talking about family members.</li> </ol>	01	
13. Describe habits and routines	Concept of habits     and routines	<ol> <li>Group discussion on habits and routines</li> <li>Group activity on describing routines</li> </ol>	01	
14. Ask or give directions to others	Asking for directions     Using landmarks	<ol> <li>Role-play on asking and giving directions</li> <li>Identifying symbols used for giving directions</li> </ol>	01	
Total				

Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Identify and analyse own strengths and weaknesses	<ol> <li>Understanding self</li> <li>Techniques for         identifying strengths         and weaknesses</li> <li>Difference between         interests and abilities</li> </ol>	<ol> <li>Activity on writing aims in life</li> <li>Preparing a worksheet on interests and abilities</li> </ol>	03
2. Demonstrate personal grooming skills	<ol> <li>Guidelines for dressing and grooming</li> <li>Preparing a personal grooming checklist</li> </ol>	<ol> <li>Role-play on dressing and grooming standards</li> <li>Self-reflection activity on various aspects of personal grooming</li> </ol>	04
3. Maintaining personal hygiene	<ol> <li>Importance of personal hygiene</li> <li>Three steps to personal hygiene</li> <li>Essential steps of hand washing</li> </ol>	Role-play on     personal hygiene     Assignment on     personal hygiene	03

4. Demonstrate the knowledge of working in a team and participating in group activities	Describe the benefits of teamwork     Working in a team	Assignment on     working in a team     Self-reflection on     teamwork	03
5. Develop networking skills	Benefits of networking skills     Steps to build networking skills	Group activity on networking in action     Assignment on networking skills	03
6. Describe the meaning and importance of self-motivation	<ol> <li>Meaning of selfmotivation</li> <li>Types of motivation</li> <li>Steps to building selfmotivation</li> </ol>	Activity on staying motivated     Assignment on reasons hindering motivation	03
7. Set goals	Meaning of goals and purpose of goal-setting     Setting SMART goals	Assignment on setting SMART goals     Activity on developing long-term and short-term goals using SMART method	03
8. Apply time management strategies and techniques	Meaning and importance of time management     Steps for effective time management	Preparing a     checklist of daily     activities	03
Total			25

Learning	Theory	Practical	Duration
Outcome	(08 hrs)	(12 hrs)	(20 hrs)
Create a     document on the     word processor	<ol> <li>Introduction to ICT</li> <li>Advantages of using a word processor.</li> <li>Work with Libre Office Writer</li> </ol>	<ol> <li>Demonstration and practice of the following:         <ul> <li>Creating a new document</li> <li>Typing text</li> <li>Saving the text</li> <li>Opening and saving file on Microsoft Word/Libre Office</li> </ul> </li> </ol>	02

		Writer.	
2. Identify icons on the toolbar	<ol> <li>Status bar</li> <li>Menu bar</li> <li>Icons on the         Menu bar</li> <li>Multiple ways to         perform a         function</li> </ol>	<ol> <li>Group activity on using basic user interface of LibreOffice writer</li> <li>Group activity on working with Microsoft Word</li> </ol>	02
3. Save, close, open and print document	<ol> <li>Save a word document</li> <li>Close a word document</li> <li>Open an existing document</li> <li>Print</li> </ol>	<ol> <li>Group activity on performing the functions for saving, closing and printing documents in LibreOffice Writer</li> <li>Group activity on performing the functions for saving, closing and printing documents in Microsoft Word</li> </ol>	02
4. Format text in a word document	<ol> <li>Change style and size of text</li> <li>Align text</li> <li>Cut, Copy, Paste</li> <li>Find and replace</li> </ol>	<ol> <li>Group activity on formatting text in LibreOffice Writer</li> <li>Group activity on formatting text in Microsoft Word</li> </ol>	02
5. Check spelling and grammar in a word document	Use of spell checker     Autocorrect	Group activity on checking spellings and grammer using LibreOffice Writer     Group activity on checking spellings and grammer using Microsoft Word	02
6. Insert lists, tables, pictures, and shapes in a word document	<ol> <li>Insert bullet list</li> <li>Number list</li> <li>Tables</li> <li>Pictures</li> <li>Shapes</li> </ol>	Practical exercise of inserting lists and tables using LibreOffice Writer	03
7. Insert header, footer and page number in a word document	<ol> <li>Insert header</li> <li>Insert footer</li> <li>Insert page         number</li> <li>Page count</li> </ol>	<ol> <li>Practical exercise of inserting header, footer and page numbers in LibreOffice Writer</li> <li>Practical exercise of inserting header, footer</li> </ol>	03

		and page numbers in Microsoft Word	
8. Make changes by using the track change option in a word document	<ol> <li>Tracking option</li> <li>Manage option</li> <li>Compare documents</li> </ol>	Group activity on performing track changes in LibreOffice Writer     Group activity on performing track changes in Microsoft Word	04
	Total		20

Learning	Theory	Practical	Duration
Outcome  1. Differentiate between different kinds of businesses	1. Introduction to entrepreneurship 2. Types of business activities	1. Role-play on different kinds of businesses around us	(25 hrs)
2. Describe the significance of entrepreneurial values	<ol> <li>Meaning of value</li> <li>Values of an         Entrepreneur     </li> <li>Case study on         qualities of an         entrepreneur     </li> </ol>	Role-play on     qualities of an     entrepreneur	03
3. Demonstrate the attitudinal changes required to become an entrepreneur	Difference between     the attitude of     entrepreneur and     employee	Interviewing     employees and     entrepreneurs	03
4. Develop thinking skills like an entrepreneur	<ol> <li>Problems of entrepreneurs</li> <li>Problem-solving</li> <li>Ways to think like an entrepreneur</li> </ol>	Group activity on identifying and solving problems	04
5. Generate business ideas	<ol> <li>The business cycle</li> <li>Principles of idea creation</li> <li>Generating a business idea</li> <li>Case studies</li> </ol>	Brainstorming on generating a business ideas	04

6. Describe customer needs and the importance of conducting a customer survey	Understanding     customer needs     Conducting a     customer survey	Group activity to conduct a customer survey	04
7. Create a business plan	<ol> <li>Importance of business planning</li> <li>Preparing a business plan</li> <li>Principles to follow for growing a business</li> <li>Case studies</li> </ol>	Group activity on developing a business plan	04
Total			25

Learning Outcome	Theory (07 hrs)	Practical (08 hrs)	Duration (15 hrs)
1. Describe the importance of the main sector of the green economy	<ol> <li>Meaning of ecosystem, food chain and sustainable development</li> <li>Main sectors of the green economy- E-waste management, green transportation, renewal energy, green construction, and water management</li> </ol>	Group discussion     on sectors of green     economy     Poster making on     various sectors for     promoting green     economy	06
2. Describe the main recommendations of policies for the green economy	Policies for a green economy	Group discussion     on initiatives for     promoting the green     economy     Writing an essay or     a short note on the     important initiatives     for promoting green     economy.	03
3. Describe the major green sectors/ areas and the role of various stakeholders in the green economy	Stakeholders in the green economy	Group discussion     on the role of     stakeholders in the     green economy     Making solar     bulbs.	03
4. Identify the role of	1. Role of the government	1. Group discussion	03

government and private agencies in the green economy	in promoting a green economy  2. Role of private agencies in promoting green economy	on the role of Government and Private Agencies in promoting a green economy. 2. Poster making on green sectors.	
Total			15

# PART B: VOCATIONAL SKILLS

S. No.	Units			
1.	Unit 1: Handicraft Industry in India	25		
2.	Unit 2: Fundamentals of Design	20		
3.	Unit 3: Tools and Materials	30		
4.	Unit 4: Production Process of Paper Mache Products	35		
5.	Unit 5: Design and Development of Different Paper Mache Products	35		
6.	Unit 6: Health, Hazards, and Safety Measures at the Workplace	20		
	Total	165		

	Learning Outcome	Theory (10Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
	Introduction to the Handicraft Industry in India	<ol> <li>Introduction to handicraft and handloom industry</li> <li>Scenario of handicraft Industry in India</li> <li>Overview of History and Origin of Paper Mache Craft Around the World</li> </ol>	<ol> <li>Visit and observe a local handicraft cluster</li> <li>Prepare a chart/report on industry scenario</li> <li>Interview an artisan about career &amp; challenges</li> <li>Make a timeline of Paper Mache history</li> </ol>	6
2.	Scope of Paper Mache Craft	<ol> <li>Career opportunity for paper mache artisans</li> <li>Challenges and limitations faced by paper mache craft</li> </ol>	<ol> <li>Survey career opportunities for artisans</li> <li>List challenges faced by craft makers</li> <li>Case study comparison: artisan success stories</li> <li>Analyze limitations in paper mache craft sector</li> <li>Prepare a vision statement for future opportunities</li> </ol>	6
	Diversification of Paper Mache Craft	Diversification of     Paper Mache Craft     in India	1. Chart product range in religious, festival, decoration	8

	<ul> <li>Religious &amp; Festival Decoration</li> <li>Home Decoration Items</li> <li>Toys &amp; Masks</li> <li>Stationery and Gift Items</li> <li>Fashion &amp; Jewellery</li> <li>Educational Model and Projects</li> <li>Contemporary Art &amp; Sculptures</li> <li>Eco-friendly Packaging &amp; Consumer Goods</li> <li>Cultural Tourism Souvenirs</li> <li>2. Paper Mache Crafts Across Different States of India</li> <li>Kashmir</li> <li>Uttar Pradesh</li> <li>Rajasthan</li> <li>Gujarat</li> <li>West Bengal</li> <li>Himanchal Pradesh</li> <li>Madhya Pradesh</li> <li>Orissa</li> <li>Tamil Nadu</li> <li>Bihar</li> </ul>	<ol> <li>Poster/map of crafts across different Indian states</li> <li>Display and explain diversified paper mache items</li> <li>Group discussion on market trends</li> <li>Portfolio of diversified products made in class</li> </ol>	
4. Roles and Responsibilities of Paper Mache Products Artisan	<ol> <li>Attributes of paper mache products artisan</li> <li>Roles and Responsibilities of Paper Mache Products Artisan</li> <li>Terminologies Related to Paper Mache Handicraft</li> </ol>	<ol> <li>Discuss and list essential artisan attributes (e.g., patience, creativity, attention to detail) and relate them to quality craft outcomes.</li> <li>Prepare illustrated flashcards or posters explaining key paper mache terms (like sakhta, pulp, atiji glue) and their use.</li> <li>Demonstrate the complete paper mache product-making process, and create a daily checklist outlining the</li> </ol>	5

	artisan's tasks and responsibilities.	
Total		25

# UNIT 2: FUNDAMENTALS OF DESIGN

Learning Outcome	Theory (10 Hrs)	Practical (25Hrs)	Duration (20Hrs)
1. Elements of Design	<ul><li>Colour</li><li>Line</li><li>Shape</li><li>Form</li><li>Space</li><li>Texture</li></ul>	<ol> <li>Sketch products using colour, line, shape, form</li> <li>Make a mood board of textures and materials</li> <li>Hands-on demonstration of design elements on mock item</li> <li>Create Peer critique of design variations</li> <li>Create illustrative chart of design element</li> </ol>	10
2. Principles of Design	<ul> <li>Proportion</li> <li>Balance</li> <li>Rhythm</li> <li>Emphasis</li> <li>Harmony</li> <li>Variety</li> <li>Movement</li> </ul>	<ol> <li>Apply balance and harmony to product layout</li> <li>Group mural/project applying rhythm/emphasis</li> <li>Design and present product showing movement/variety</li> <li>Interactive game building design principles</li> </ol>	10
	Total		20

IINIT	3.	TOOLS	AND	M A 1	TERIALS	3
	• 7		~ 111/			

Learning	Theory	Practical	Duration
Outcome	(10 Hrs)	(25 Hrs)	(30Hrs)
I. Tools and Materials used in Paper Mache Craft	<ol> <li>Tools Used for making Paper mache products</li> <li>Machines Used for making Paper mache products</li> </ol>	<ol> <li>Identify and label common paper mache tools</li> <li>Safety demo: tool handling and storage</li> <li>Maintenance workshop: cleaning and organizing tools</li> <li>Tools poster/chart for lab display</li> </ol>	15

# **UNIT 4: PRODUCTION PROCESS OF PAPER MACHE PRODUCTS**

Learning Outcome	Theory (10Hrs)	Practical (20Hrs)	Duratio n (35Hrs)
1. Pre-Production Process	<ol> <li>Preparation of Primary Material</li> <li>Turning Paper into Paper Pulp</li> <li>Preparation of Secondary Material</li> <li>Preparation of Gond (Natural Adhesive)</li> <li>Preparation of Multani Mitti (Fuller's Earth)</li> <li>Preparation of Wheat Paste</li> <li>Preparation of Paper Mache</li> <li>Type 1</li> <li>Type 2</li> <li>Type 4</li> </ol>	<ol> <li>Prep paper pulp:         waste paper hands-         on</li> <li>Make natural         adhesive         (gond/wheat paste)</li> <li>Demonstrate         measurements for         materials</li> <li>Lab notebook: steps         and observations</li> <li>Test adhesives for         quality and compare         results</li> </ol>	13

	Total	portiono	30
3. Post-Process and Finishing of Paper Mache Products	<ol> <li>Inspection and Finishing</li> <li>Drying the Paper Mache Product</li> <li>Checking for Cracks or Rough Parts</li> <li>Filling Cracks and Holes</li> <li>Colouring</li> <li>Waterproofing and Strengthening</li> </ol>	<ol> <li>Inspect, fill cracks, sand and dry product</li> <li>Colour and paint final item</li> <li>Demonstrate waterproofing/strengt hening process</li> <li>Safety check during finishing</li> <li>Photograph finished products and attach in portfolio</li> </ol>	10
2. Production Process of Different Paper Mache Process	<ol> <li>Sculpting         <ul> <li>Without Armature</li> <li>With Armature</li> </ul> </li> <li>Different             <ul> <li>Techniques within</li> <li>Sculpting</li> <ul> <li>Rolling</li> <li>Pinching and</li> <li>Moulding</li> <li>Joining and</li> <li>Blending</li> </ul> </ul></li> <li>Mold and Cast                           <ul> <li>Using One Piece</li> <li>Mold</li> <li>Using Two-Piece</li> <li>Molds</li> </ul> </li> </ol>	<ol> <li>Sculpt item—rolling, pinching, molding methods</li> <li>Mold and cast simple object (e.g., bowl)</li> <li>Blend and join pieces in assembly demo</li> <li>Peer review finished product</li> <li>Document process in portfolio</li> </ol>	12

UNIT 5: DESIGN AND DEVELOPMENT OF DIFFERENT PAPER MACHE PRODUCTS			
Learning Outcome	Theory (7Hrs)	Practical (13Hrs)	Duration (35Hrs)
Product Making     using Sculpting     Technique	<ol> <li>Sculpting without armature</li> <li>Nariyal Ganesh Idol</li> <li>Jewelry –         Necklace Making</li> <li>Decorative Ball</li> <li>Box with a         Wooden Base</li> <li>Door/Dresser/Window Knob</li> <li>Gond Art Mural</li> <li>Fridge Magnet</li> <li>Sculpting with armature</li> <li>Pen Stand</li> </ol>	<ol> <li>Create idol, jewelry, or decorative box</li> <li>Mural or magnet making (class activity)</li> <li>Design and produce basic classroom product</li> <li>Build pen stand or vase with basic wire structure</li> <li>Record structure, measurements, and assembly</li> <li>Finish product: colour or surface treatment</li> <li>Step-by-step photo documentation</li> </ol>	20

	• Vase	8. Organize Peer presentation and critique	
2. Product Making using Mold and Cast Technique	<ol> <li>Mold and Cast (Using One Piece Mold)</li> <li>Colorful Bowl</li> <li>Tray</li> <li>Name plates/Wall Hangings</li> <li>Mold and Cast (Using Two Piece Mold)</li> <li>Bird</li> </ol>	<ol> <li>Cast a bowl, tray, nameplate, or wall hanging</li> <li>Use two-piece mold for bird/motif Experiment with colour finishes</li> <li>Mini-exhibition of completed cast products</li> </ol>	15
	Total		20

# UNIT 6: HEALTH, HAZARDS, AND SAFETY MEASURES AT THE WORKPLACE

Learning Outcome	Theory (7 Hrs)	Practical (13 Hrs)	Duration (20 Hrs)
Potential Hazards at the Workplace	<ol> <li>Types of potential hazards at the workplace</li> <li>Keeping work area free from hazards</li> </ol>	<ol> <li>List hazards in lab/workshop</li> <li>Demonstrate safe tool/material handling</li> <li>Role play: responding to workplace incidents</li> <li>Hazard warning poster or checklist</li> <li>Review and update safety guidelines</li> </ol>	07
2. Health, Safety, and Security at the Workplace	<ol> <li>Work area management</li> <li>Complying with health and safety instructions</li> <li>Complying with gender and PwD related instructions</li> <li>Monitoring potential risk at the workplace</li> <li>Safety Guidelines</li> </ol>	<ol> <li>Practice correct use of PPE (masks/gloves)</li> <li>Daily cleaning and workstation management</li> <li>First aid simulation exercise Document gender/PwD inclusivity adaptations</li> <li>Team reflection on workspace improvements</li> </ol>	07
3. Environmental Safety, Emergency Preparedness, and Workplace Signage	Environmental     management     system     Emergency     Response and     Training	<ol> <li>Discuss environmental safety methods</li> <li>Simulate emergency preparedness drill</li> <li>Create and display safety signage Prepare</li> </ol>	06

# **GRADE 12**

# PART A: EMPLOYABILITY SKILLS

S. No.	Units	Duration (hrs)
1.	Communication Skills- IV	25
2.	Self-management Skills – IV	25
3.	Information and Communication Technology Skills – IV	20
4.	Entrepreneurial Skills – IV	25
5.	Green Skills – IV	15
Total		110

Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
Demonstrate active listening skills	<ol> <li>Active listening -         listening skill,         stages of active         listening</li> <li>Overcoming barriers         to active listening</li> </ol>	<ol> <li>Group discussion on factors affecting active listening</li> <li>Poster making on steps for active listening</li> <li>Role-play on negative effects of not listening actively</li> </ol>	10
2. Identify the parts of speech	Parts of speech –     using capitals,     punctuation, basic     parts of speech,     Supporting parts of     speech	<ol> <li>Group practice on identifying parts of speech</li> <li>Group practice on constructing sentences</li> </ol>	10
3. Write sentences	<ol> <li>Writing skills to practice the following:</li> <li>Simple sentence</li> <li>Complex</li> </ol>	<ol> <li>Group activity on writing sentences and paragraphs</li> <li>Group activity on practicing writing</li> </ol>	05

sentence

sentences in active

<ul> <li>Types of objects</li> <li>Identify the types of sentences</li> <li>Active and Passive sentences</li> <li>Statement/ Declarative sentence</li> <li>Question/</li> <li>Interrogative sentence</li> <li>Emotion/ Reaction or Exclamatory sentence</li> <li>Order or Imperative sentence</li> <li>Active and types of sentences (i.e., declarative, exclamatory, interrogative and imperative)</li> </ul>	
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	Learning Outcome	Theory (10 hrs)		Practical (15 hrs)	Duration (25 hrs)
va int mo	escribe the rious factors fluencing otivation and ositive attitude	<ol> <li>Motivation and positive attitude</li> <li>Intrinsic and extrinsic motivation</li> <li>Positive attitude – ways to maintain positive attitude</li> <li>Stress and stress management - ways to manage stress</li> </ol>	1. 2.	Role-play on avoiding stressful situations Activity on listing negative situations and ways to turn it positive	10
be	escribe how to come result iented	How to become result oriented?     Goal setting – examples of resultoriented goals	1.	Group activity on listing aim in life	05
im aw ba tra	escribe the apportance of self- vareness and the asic personality eaits, types and sorders	<ol> <li>Steps towards self-awareness</li> <li>Personality and basic personality traits</li> <li>Common personality disorders-         <ul> <li>Suspicious</li> <li>Emotional and</li> </ul> </li> </ol>		Group discussion on self-awareness Group discussion on common personality disorders Brainstorming steps to overcome personality disorder	10

	impulsive		
Total			25

UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS - IV

Learning Outcome	Theory (06 hrs)	Practical (14 hrs)	Duration (20 hrs)
Identify the components of a spreadsheet application	1. Getting started with spreadsheet - types of a spreadsheet, steps to start LibreOffice Calc., components of a worksheet.	1. Group activity on identifying components of spreadsheet in LibreOffice Calc.	02
2. Perform basic operations in a spreadsheet	<ol> <li>Opening workbook and entering data – types of data, steps to enter data, editing and deleting data in a cell</li> <li>Selecting multiple cells</li> <li>Saving the spreadsheet in various formats</li> <li>Closing the spreadsheet</li> <li>Opening the spreadsheet.</li> <li>Printing the spreadsheet.</li> </ol>	1. Group activity on working with data on LibreOffice Calc.	03
3. Demonstrate the knowledge of working with data and formatting text	<ol> <li>Using a spreadsheet for addition – adding value directly, adding by using cell address, using a mouse to select values in a formula, using sum function, copying and moving formula</li> <li>Need to format cell and content</li> <li>Changing text style and font size</li> <li>Align text in a cell</li> <li>Highlight text</li> </ol>	<ol> <li>Group activity on formatting a spreadsheet in LibreOffice Calc</li> <li>Group activity on performing basic calculations in LibreOffice Calc.</li> </ol>	02
4. Demonstrate the	Sorting data	1. Group activity on	03

knowledge of using advanced features in spreadsheet	<ul><li>2. Filtering data</li><li>3. Protecting spreadsheet with password</li></ul>	sorting data in LibreOffice Calc	
5. Make use of the software used for making slide presentations	<ol> <li>Presentation software available</li> <li>Stapes to start         LibreOffice Impress</li> <li>Adding text to a presentation</li> </ol>	Group practice     on working with     LibreOffice     Impress tools	02
6. Demonstrate the knowledge to open, close and save slide presentations	Open, Close, Save and     Print a slide presentation	Group activity on saving, closing and opening a presentation in LibreOffice Impress	01
7. Demonstrate the operations related to slides and texts in the presentation	1. Working with slides and text in a presentation-adding slides to a presentation, deleting slides, adding and formatting text, highlighting text, aligning text, changing text colour	1. Group activity on working with font styles in LibreOffice Impress	04
8. Demonstrate the use of advanced features in a presentation	<ol> <li>Advanced features used in a presentation</li> <li>Inserting shapes in the presentation</li> <li>Inserting clipart and images in a presentation</li> <li>Changing slide layout</li> </ol>	Group activity on changing slide layout on LibreOffice Impress	03
Total			20

Learning	Theory	Practical	Duration
Outcome	(10 hrs)	(15 hrs)	(25 hrs)
1. Describe the concept of entrepreneurshi p and the types and roles and functions entrepreneur	<ol> <li>Entrepreneurship and entrepreneur</li> <li>Characteristics of entrepreneurship</li> <li>Entrepreneurship-art and science</li> <li>Qualities of a successful entrepreneur</li> <li>Types of entrepreneurs</li> <li>Roles and functions of</li> </ol>	<ol> <li>Group discussion on the topic "An entrepreneur is not born butcreated".</li> <li>Conducting a classroom quiz on various aspects of entrepreneurship.</li> <li>Chart preparation on types of entrepreneurs</li> <li>Brainstorming activity</li> </ol>	10

	an entrepreneur 7. What motivates an entrepreneur 8. Identifying opportunities and risk- taking 9. Startups	on What motivates an entrepreneur	
2. Identify the barriers to entrepreneurshi p	<ol> <li>Barriers to entrepreneurship</li> <li>Environmental barriers</li> <li>No or faulty business plan</li> <li>Personal barriers</li> </ol>	<ol> <li>Group discussion         about "What we fear         about         entrepreneurship"</li> <li>Activity on taking an         interview of an         entrepreneur.</li> </ol>	05
3. Identify the attitude that make an entrepreneur successful	Entrepreneurial     attitude	Group activity on identifying entrepreneurial attitude.	05
4. Demonstrate the knowledge of entrepreneurial attitude and competencies	<ol> <li>Entrepreneurial competencies</li> <li>Decisiveness</li> <li>Initiative</li> <li>Interpersonal skillspositive attitude, stress management</li> <li>Perseverance</li> <li>Organisational skillstime management, goal setting, efficiency, managing quality.</li> </ol>	<ol> <li>Playing games, such as "Who am I".</li> <li>Brainstorming a business ideas</li> <li>Group practice on "Best out of Waste"</li> <li>Group discussion on the topic of "Let's grow together"</li> <li>Group activity on listing stress and methods to deal with it like Yoga, deep breathing exercises, etc.</li> <li>Group activity on time management</li> </ol>	05
Total			25

UNIT 5: GREEN SKILLS-IV			
Learning Outcome	Theory (05 hrs)	Practical (10 hrs)	Duration (15 hrs)
1. Identify the benefits of the green jobs	<ol> <li>Green jobs</li> <li>Benefits of green jobs</li> <li>Green jobs in different sectors:         <ul> <li>Agriculture</li> <li>Transportation</li> <li>Water conservation</li> <li>Solar and wind</li> </ul> </li> </ol>	<ol> <li>Group discussion on the importance of green job.</li> <li>Chart preparation on green jobs in different sectors.</li> </ol>	08

	energy  Eco-tourism  Building and construction  Solid waste management  Appropriate technology		
2. State the importance of green jobs	<ul> <li>1. Importance of green jobs in</li> <li>Limiting greenhouse gas emissions</li> <li>Miniming waste and pollution</li> <li>Protecting and restoring ecosystems</li> <li>Adapting to the effects of climate change</li> </ul>	<ol> <li>Preparing posters on green jobs.</li> <li>Group activity on tree plantation.</li> <li>Brainstorming different ways of minimising waste and pollution</li> </ol>	07
Total			15

# PART B-VOCATIONAL SKILLS

S. No.	Units	Duration (Hrs)
1.	Unit 1: Current Scenario, Employability and Entrepreneurship in Paper Mache Craft	25
2.	Unit 2: Design Thinking, Innovation and Aesthetics	25
3.	Unit 3: Design and Development for different Paper Mache Products	35
4.	Unit 4: Sustainability for Paper Mache Craft	35
5.	Unit 5: Effective Teamwork at Workplace	25
6.	Unit 6: Complying with Workplace Requirements	20
	Total	165

UNIT 1: CURRENT SCENARIO, EMPLOYABILITY AND ENTREPRENEURSHIP IN PAPER MACHE CRAFT				
Learning Outcome	Theory (10Hrs)	Practical (15 Hrs)	Duration (25Hrs)	
1. Identify Emerging Trends in Paper Mache Products	<ol> <li>Introduction to         Modern Paper         Mache Products         <ul> <li>Eco-Friendly              Packaging</li> <li>Functional              Products</li> </ul> </li> <li>Fashion and         Wearable Art</li> </ol>	<ol> <li>Conduct a market survey to identify new paper mache products in local shops and online platforms.</li> <li>Prepare a presentation on eco-friendly packaging, functional products, and</li> </ol>	12	

Packaging paper mache products.  Total paper mache products.	2. Planning for Entrepreneurial Success in India  2. Planning for Entrepreneurial Success with Paper Mache Craft  2. Planning for Entrepreneurial Success with Paper Mache Craft  3. Online Presence  4. Customer Segmentation  5. Quality Control  6. Material Integration  7. Personalization  8. Personalization  9. Presentation and	product demand and design preferences.  1. Develop a business plan for a paper mache product line, including target customers and marketing strategies.  2. Role-play a customer segmentation exercise to identify potential buyers for different paper mache products.  3. Design and present packaging ideas for a paper mache product to enhance its market appeal.  4. Conduct a SWOT analysis of a paper mache business idea.  5. Prepare a mock-up of an online store showcasing paper mache products.	13
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UNIT 2: DESIGN T	HINKING, INNOVATION	N AND AESTHETICS	,
Learning Outcome	Theory (10Hrs)	Practical (15Hrs)	Duration (25Hrs)
1. Apply Design Thinking and Innovation	<ol> <li>Identify the Problem</li> <li>Think of Ideas</li> <li>Make a Sample</li> <li>Test the Product</li> <li>Improve the Product</li> <li>Creative Transformation Matters</li> </ol>	<ol> <li>Brainstorm and sketch solutions to a real-world problem using paper mache (e.g., eco-friendly storage solutions).</li> <li>Create a prototype of a paper mache product based on user feedback.</li> </ol>	8

		3. Conduct a peer review session to test and improve the prototype.  4. Document the design thinking process in a portfolio, including problem identification, ideation, prototyping, and testing.  2. 5. Present the final product to the class, explaining the design thinking approach used.	
2. Use of Measurements, Drawings and Shaping Ideas into Products	<ol> <li>Visualization and Drawing for Developing Paper Mache Products</li> <li>Drawing for Developing Paper Mache Products</li> <li>Measurement in Paper Mache Products</li> <li>Process of idea generation to product innovation</li> <li>The Journey of an Idea</li> <li>Understanding the User's Needs</li> <li>Steps in Product Development</li> <li>Role of Design in Innovation</li> <li>Case Studies / Inspiration Corner</li> </ol>	1. Practice drawing scaled designs for paper mache products (e.g., masks, figurines). 2. Measure and cut materials according to the design specifications. 3. Create a 3D model of a paper mache product using the drawn design. 4. Compare the finished product with the original design and discuss any modifications made. 5. Prepare a step-by-step guide for making a paper mache product based on the design.	10
3. Appreciate the Role of Aesthetics in Craft	<ol> <li>Importance of         Aesthetics in         Product Design         <ul> <li>Visual Appeal</li> <li>Cultural</li></ul></li></ol>	1. Analyze the visual appeal of different paper mache products and discuss their market value. 2. Create a mood board showcasing cultural	7

<ul> <li>Market Value</li> <li>User <ul> <li>Experience</li> <li>Creative</li> <li>Identity</li> </ul> </li> </ul>	expressions in paper mache art. 3. Design a paper mache product that reflects a specific cultural theme.	
Total		25

#### UNIT 3: DESIGN AND DEVELOPMENT FOR DIFFERENT PAPER MACHE PRODUCTS

Learning Outcome	Theory (10 Hrs)	Practical (25 Hrs)	Duration (35 Hrs)
Make products     using sculpting     Techniques	Sculpting (With Armature)  • Warli Mural • Mask • Pop Art Mural  Sculpting (With Armature)  1. Sculpt a paper mache mask using the armature technique. 2. Create a Warli mural using paper mache. 3. Design and make a pop art mural with paper mache. 4. Build a center table and stool using paper mache. 5. Make a doll figurine using sculpting techniques.		20
1. Mold and Cast (Using One Piece Mold)  • Memento • Fort Relief  2. Mold and Cast (Using Two Piece Mold) • Paper Mache Box • Display Head • Decorative Container • A Statue of Swami Vivekananda		<ol> <li>Cast a paper mache memento using a one-piece mold.</li> <li>Create a fort relief using a two-piece mold.</li> <li>Make a paper mache box display head.</li> <li>Design a decorative container using molding techniques.</li> </ol>	15
	Total		35

UNIT 4: SUSTAINABILITY FOR PAPER MACHE CRAFT				
				Duration (35Hrs)

1. Sustainability in Paper Mache Craft	<ol> <li>Introduction to Sustainability</li> <li>Key Features of Sustainability in Paper Mache Craft         <ul> <li>Use of Waste Material</li> <li>Eco Friendly Aspect</li> <li>Low Energy Process</li> <li>Biodegrada ble</li> <li>Supports Local Livelihood</li> <li>Promotes Recycling</li> </ul> </li> </ol>	1. Research and present on the use of waste materials in paper mache production. 2. Create a paper mache product using only recycled materials. 3. Discuss the eco-friendly aspects of paper mache craft in a group discussion.	20
Sustainable     Development Goals     and their Targets	<ol> <li>Introduction to Sustainable Development Goals (SDGs) – 2030 and their Targets</li> <li>2. SDGs Through Paper Mache Craft</li> </ol>	1. Identify SDGs relevant to paper mache craft and present findings. 2. Create a project that demonstrates how paper mache supports local livelihoods. 3. Write a report on the impact of paper mache craft on environmental sustainability.	15
Total			35

UNIT 5: EFFECTIVE TEAMWORK AT WORKPLACE				
Learning Outcome	Theory (10Hrs)	Practical (15 Hrs)	Duration (25Hrs)	
1. Demonstrate Accountability, Adaptability, Commitment and Trust at Workplace	<ol> <li>Importance of accountability, adaptability, commitment and trust at work places</li> <li>Understanding own roles, duties and accountability</li> </ol>	<ol> <li>Role-play scenarios that require accountability and adaptability in a team setting.</li> <li>Participate in a group project to complete a paper mache product, assigning specific</li> </ol>	15	

	<ul><li>3. Performing roles effectively at workplace</li><li>4. Adapting to the changing work situation</li></ul>	roles and responsibilities. 3. Reflect on personal contributions and team dynamics in a group discussion. 4. Create a checklist for effective teamwork in a paper mache workshop.	
2. Foster Creativity and Efficiency at Workplace	<ol> <li>Creative freedom and its importance</li> <li>Improving the existing techniques to increase process efficiency</li> </ol>	<ol> <li>Brainstorm new techniques to improve the efficiency of paper mache production.</li> <li>Organize a creative challenge to design a unique paper mache product.</li> <li>Document the process of improving an existing technique.</li> </ol>	10
Total			25

	Learning Theory Outcome (10 Hrs)		Practical (10 Hrs)	Duration (20 Hrs)	
1.	Workplace Environment, Security Measures, and Emergency Management	<ol> <li>Team-work and coordination with team members</li> <li>Behavioural aspects of successful teamwork, Language Proficiency and Communication Skills at Workplace</li> </ol>	<ol> <li>Conduct a safety audit of the paper mache workshop.</li> <li>Role-play emergency response scenarios (e.g., fire, injury).</li> <li>Create a safety checklist for the workshop.</li> <li>Organize a workshop on the importance of security measures in the workplace.</li> </ol>	10	
2.	Applying and Promoting Workplace Requirements	<ol> <li>Developing Personal         Development Goals         and Management tools         and practices     </li> <li>Evaluating one's own         performance and         achieving excellence     </li> </ol>	<ol> <li>Develop personal development goals for improving workplace performance.</li> <li>Evaluate personal performance using a</li> </ol>	10	

3. Motivating others to full-fill workplace requirements	self-assessment tool. 3. Motivate peers to fulfill workplace requirements through group activities. 4. Create a poster on workplace requirements and best practices.	
Total		20

### 6. ORGANISATION OF FIELD VISITS

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

Visit Craft mela, Exhibitions, Market, Workshops, relevant clusters, industries and small units to observe the following: Location, Site, Office building, Store, Packing area, Handicraft production area, Cutting area and Industrial machines. During the visit, students should obtain the following information from the owner or the supervisor of the industry:

- 1. Area under industry and its layout
- 2. Departments in industry
- 3. Work culture and environment of various departments
- 4. Various tools and equipment of paper mache craft
- 5. Different buyers, the company deals with
- 6. Product range of the industry
- 7. Understand time and action calendar
- 8. Manufacture, export, import, sale procedure
- 9. Manpower engaged
- 10. Total expenditure of industry/unit/workspace
- 11. Total annual income
- 12. Profit/Loss (Annual)
- 13. 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

- 1. Charts and posters illustrating paper mache processes, techniques, and safety protocols
- 2. Samples of finished paper mache products (e.g., decorative items, idols, utility objects)
- 3. Tools and equipment used for paper mache crafting such as sculpting tools, molds, brushes, paints
- 4. Raw materials like recycled paper pulp, natural adhesives (gond, wheat paste), colors, binding agents
- 5. Safety equipment like gloves, aprons, dust masks, goggles for student use during practice
- 6. Work tables and drying racks for handling and curing paper mache items
- 7. Instructional manuals, recipe sheets for different adhesives and finishes

#### B. Equipment's to be seen during Field Visit

- 1. Sculpting hand tools
- 2. One-piece and two-piece molds
- 3. Adhesive preparation and mixing tools
- 4. Drying chambers or controlled rooms
- 5. Painting and finishing stations
- 6. Safety installations
- 7. Packaging and storage facilities
- 8. Hollander Beater, Hydra Pulper, Paper Squeezing Machine, Klin Drying Machine etc
- 9. Fire extinguisher
- 10. Security cameras
- 11. LCD screens
- 12. Safety sign boards
- 13. Personal protective equipment's (PPE) like gloves, helmets, jackets, harness etc.
- 14. Locking systems
- 1. Housekeeping equipment's on site
  - Vacuum cleaner
  - Mops
  - Cleaning chemicals
  - Cleaning Robots
  - Air purifiers
  - Filtering machines
  - Spill Absorbents
- 2. Waste disposal equipment's such as scrap bins, recyclers, waste processing machines etc.
- 3. 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

S. No.	Item	Quantity for a batch of 40 Students	Tentative Rate (Rs.)	Tentative price (Rs.)
1.	Paint Brushes (various sizes)	40 sets	50	2000
2.	Cutter (utility knife)	10	150	1500
3.	Sandpaper (assorted grades)	20 sheets	20	400
4.	Palette / Colour mixing plates	10	100	1000
5.	Acrylic/Dust/Enamel Paints (variety)	Bulk/Sufficient for projects	300	12000
6.	Scissors (sharp, medium size)	40	80	3200
7.	Wire Cutter	10	200	2000
8.	Cutting Pliers	10	250	2500
9.	Pedi (flattening tool)	10	100	1000
10.	Knives (straight and curved)	15 sets	150	2250
11.	Clay Modelling Tools	15 sets	100	1500
12.	Funner (cleaning brush)	10	50	500
13.	Stainer (strainer for adhesives)	10	100	1000
14.	Bowls and Containers	20	80	1600
15.	Needles	40	20	800
16.	Sponge (soft, for finishing)	40	30	1200
17.	Tacky Glue (500 ml bottles)	20 bottles	150	3000
18.	Cardboard sheets (large)	40 sheets	40	1600
19.	Chalk Powder/Whitening Powder	2 kg	120	240
20.	Wire (for armatures)	5 kg	200	1000
21.	Flour and Rice Paste (adhesive)	Sufficient for glue preparation	100	1000
22.	Multani Mitti (Fuller's Earth)	1 kg	150	150
23.	Gond, Imli Beej (natural adhesive powders)	Bulk	150	300
24.	Masking/Paper Tape	20 rolls	50	1000
25.	Various Papers (newspaper, tissue, etc.)	Bulk	100	1000
26.	Varnish/Lacquer (1 litre bottles)	10 liters	300	3000

27.	Personal Protective Equipment (PPE)			6000
	()	40 sets	150	
28.	Measuring Tools (ruler, scale,			2000
20.	calipers)	40 sets	50	
29.	Hydra Pulper(Breaking/recycling			
29.	paper)	1 Unit	95,000	95,000
20	Paper Squeezing Machine(Water			
30.	removal from pulp)	1 Unit	1,80,000	1,80,000
TOTAL				3,31,640.

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

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

S. No.	Qualification	Minimum Competencies	Age Limit
1.	<ul> <li>Masters in Design/Fine Arts or allied area from a recognized Institute/University, with at least 1 year work experience in relevant area.</li> <li>or</li> <li>Bachelor of Design / Diploma in Design/Arts and Craft or allied area from a recognized Institute/University with a minimum of 3 years work experience in relevant area.</li> </ul>	<ul> <li>Effective communication skills (oral and written)</li> <li>Basic computing skills</li> </ul>	<ul> <li>As per the norms applicable.</li> <li>Age relaxation to be provided as per Govt. Rules</li> </ul>

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

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

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

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

#### OR

(ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

The 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/she 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:

<sup>\*</sup> 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.

- (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 the 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 XI 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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