

CURRICULUM

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**VEGETABLE PROCESSOR  
(VP)**



**Council for Technical Education and Vocational Training**  
**Curriculum Development Division**  
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**Introduction**

This curriculum has been developed with a purpose of preparing vegetable processor as a lower level technical workforce able to get employment in the country. The technical skills incorporated in this curriculum come from the field of vegetable processing. Its contents are organized in the form of modules. So it is a tailor made curriculum with a special purpose to be implemented in a modular form.

It is a competency based curriculum. It is also designed to produce lower level technical workforce in the field of vegetable processing equipped with skills and knowledge related to vegetable processing in order to meet the demand of such workforce in the country so as to contribute in the national streamline of poverty reduction in Nepal.

**Aims**

The main aim of this curricular program is to produce skilled workforce in the field of vegetable processing by providing training to the potential citizen of the country and link them to employment opportunities in the country and abroad. The aims of this curriculum are:

- To produce lower level technical workforce in the area of vegetable processing
- To produce such technical workforce who will be able to serve the community and household people through the application of the vegetable processing techniques being an entrepreneur.

**Objectives**

After the completion of this training program, the trainees will be able:

- To be familiar with vegetables
- To apply principles of preservation
- To handle containers for packing
- To handle processing tools, materials, equipment & machines
- To process of vegetables
- To bottle / can vegetables
- To make / prepare chutneys, sauces and pickles
- To produce tomato juice
- To produce tomato ketchup
- To produce tomato sauce
- To carry out drying and dehydration of vegetables
- To perform storage of vegetables
- To manage vegetable processing activities
- To manage vegetable processing unit
- To market processed vegetable products

**Description**

This curriculum provides skills and knowledge necessary for vegetable processor as a technical worker. There will be both demonstration by trainers/instructors and opportunity by trainees to carry out the skills/tasks necessary for this level of technical workforce. Trainees will practice and learn skills by using typical tools, materials and equipment necessary for this curricular program.

On successful completion of this training, the trainees will be able to apply principles of preservation, manage/handle/maintain containers for packing, manage/handle/maintain materials / tools / equipment / machines, perform bottling / canning of vegetables, process of vegetables, make / prepare chutneys, sauces and pickles, produce tomato juice/ ketchup / sauce, perform drying / dehydration of vegetables, perform vegetable storage, manage vegetable processing activities, manage vegetable processing unit, and perform marketing of processed vegetable products.

### Course structure

<b>Job: Vegetable processor</b>		<b>Nature</b>	<b>Hours</b>			<b>Marks</b>		
<b>SN</b>	<b>Modules/sub modules</b>		<b>Th.</b>	<b>Pr.</b>	<b>Tot</b>	<b>Th.</b>	<b>Pr.</b>	<b>Tot</b>
<b>1. Vegetables; preservation; packing containers; and processing tools, materials, equipment, &amp; machines</b>		<b>T+P</b>	<b>9</b>	<b>17</b>	<b>26</b>	<b>4</b>	<b>16</b>	<b>20</b>
	1. Familiarization with vegetables	T+P	2	3	5			
	2. Applying principles of preservation	T+P	3	2	5			
	3. Containers for packing	T+P	2	4	6			
	4. Processing tools, materials, equipment & machines	T+P	2	8	10			
<b>2. Processing of specific vegetables</b>		<b>T+P</b>	<b>24</b>	<b>71</b>	<b>95</b>	<b>15</b>	<b>60</b>	<b>75</b>
	1. Processing of peeled tomatoes	T+P	2	5	7			
	2. Processing of tomatoes pulp	T+P	2	6	8			
	3. Processing of dried carrots	T+P	2	6	8			
	4. Processing of dried/dehydrated potatoes	T+P	2	6	8			
	5. Processing of dried/dehydrated leeks	T+P	2	6	8			
	6. Processing of dried onion	T+P	2	6	8			
	7. Processing of dried tomatoes	T+P	2	6	8			
	8. Processing of tomato juice	T+P	2	6	8			
	9. Processing of tomato ketchup/sauce	T+P	2	6	8			
	10. Processing of dried green beans	T+P	2	6	8			
	11. Processing of dried okra	T+P	2	6	8			
	12. Processing of dried cabbage	T+P	2	6	8			
<b>3. Bottling and canning of vegetables</b>		<b>T+P</b>	<b>10</b>	<b>40</b>	<b>50</b>	<b>10</b>	<b>40</b>	<b>50</b>
	1. General methods of bottling and canning of vegetables	T+P	1	4	5			
	2. Canning and bottling of different vegetables	T+P	9	36	45			
<b>4. Chutneys, sauces and pickles</b>		<b>T+P</b>	<b>9</b>	<b>36</b>	<b>45</b>	<b>5</b>	<b>20</b>	<b>25</b>
<b>5. Tomato products</b>		<b>T+P</b>	<b>30</b>	<b>90</b>	<b>120</b>	<b>15</b>	<b>60</b>	<b>75</b>
	1. Tomato juice	T+P	8	24	32			
	2. Tomato ketchup	T+P	11	33	44			
	3. Tomato sauce	T+P	11	33	44			
<b>6. Drying and dehydration of vegetables</b>		<b>T+P</b>	<b>7</b>	<b>14</b>	<b>21</b>	<b>4</b>	<b>16</b>	<b>20</b>
<b>7. Storage of vegetables</b>		<b>T+P</b>	<b>6</b>	<b>12</b>	<b>18</b>	<b>4</b>	<b>16</b>	<b>20</b>
<b>8. Managing processing activities/unit and marketing</b>		<b>T+P</b>	<b>7</b>	<b>8</b>	<b>15</b>	<b>3</b>	<b>12</b>	<b>15</b>
	1. Vegetable processing activities	T+P	2	2	4			
	2. Vegetable processing unit	T+P	2	4	6			
	3. Marketing	T+P	3	2	5			
<b>Sub total:</b>		<b>T+P</b>	<b>102</b>	<b>288</b>	<b>390</b>	<b>60</b>	<b>240</b>	<b>300</b>
9. On the job training (OJT)		P		160	160		100	100
<b>Total:</b>			<b>102</b>	<b>448</b>	<b>550</b>	<b>60</b>	<b>340</b>	<b>400</b>

<b>Duration</b>
The total duration of this curricular program will be 390 hours [three months] plus 160 hours of OJT.
<b>Target group</b>
The target group for this training will be all the interested individuals of the country with academic qualification of grade ten pass.
<b>Group size</b>
The group size of this training program will be not more than 30
<b>Target location</b>
The target location of this training program will be all over Nepal.
<b>Medium of Instruction</b>
The medium of instruction for this training program will be Nepali or English or both.
<b>Pattern of attendance</b>
The trainees should have 80% attendance in theory classes and 90% in Practical (Performance) to be eligible for internal assessment and final examinations.
<b>Focus of the program</b>
This is a competency based curriculum. This curriculum emphasizes on competent performance of the task specified in it. Not less than 80% time is allotted to the competencies and not more than 20% to the related technical knowledge. So, the main focus will be on the performance of the specified competencies/tasks /skills included in this curriculum.
<b>Entry criteria</b>
Individuals who meet the following criteria will be allowed to enter in this curricular program: <ul style="list-style-type: none"> <li>• <b>Five grade pass</b></li> <li>• <b>Physically and mentally fit</b></li> <li>• <b>Age : 16-25 years</b></li> <li>• Preference will be given to female, Dalit, Janjati, and Conflict affected people</li> </ul>
<b>Follow up suggestion</b>
This is not a training program only for training sake. The ultimate success of this program will rest on the proficiency of the graduates of this training program in providing services in the community either by wage employment or by self-employment. In other to assess the success of this program and collect feedbacks/inputs for the revision of the program, a schedule of follow up is suggested as follows:- <ul style="list-style-type: none"> <li>• First follow up: - Six months after the completion of the training program.</li> <li>• Second follow up: - Six months after the completion of the first follow up.</li> <li>• Follow up cycle: - In a cycle of one year after the completion of second follow up for five years</li> </ul>
<b>Certificate requirement</b>
The related training institute will provide the certificate of “Vegetable processor” to those individuals who successfully complete all the tasks with their related technical knowledge specified in this curriculum.
<b>Student Evaluation Details</b>
<ul style="list-style-type: none"> <li>• Continuous evaluation of the trainees’ performance is to be done by the related instructor/trainer to ensure the proficiency over each competency.</li> <li>• Related technical knowledge learnt by the trainees will be evaluated through written or oral tests as per the nature of the content</li> <li>• Trainees must secure minimum marks of 60% in an average of both theory and practical evaluations.</li> </ul>

<p><b>Trainers' Qualification</b></p> <ul style="list-style-type: none"> <li>• Bachelor's degree in the related field</li> <li>• Good communicative &amp; instructional skills.</li> <li>• Experience in the related field.</li> </ul>
<p><b>Trainer – Trainees Ratio</b></p> <ul style="list-style-type: none"> <li>• 1:10 for practical classes</li> <li>• Depends on the nature of subject matter and class room situation for theory classes.</li> </ul>
<p><b>Suggestion for instruction</b></p>
<p><b>1. Demonstrate task performance</b></p> <ul style="list-style-type: none"> <li>• Demonstrate task performance in normal speed</li> <li>• Demonstrate slowly with verbal description of each and every steps in the sequence of activity flow of the task performance using question and answer techniques</li> <li>• Repeat the above step for the clarification on trainees demand if necessary.</li> <li>• Perform fast demonstration of the task performance.</li> </ul>
<p><b>2. Provide trainees the opportunity to practice the task performance demonstrated.</b></p> <ul style="list-style-type: none"> <li>• Provide trainees to have guided practice:- create environment for practicing the demonstrated task performance and guide the trainees in each and every step of task performance</li> <li>• Provide trainees the opportunity to repeat &amp; re-repeat as per the need to be proficient on the given task performance</li> <li>• Switch to another task demonstration if and only if the trainees developed proficiency in the given task performance</li> </ul>
<p><b>3. Evaluation performance of the trainees/ student</b></p> <ul style="list-style-type: none"> <li>• Perform task analysis</li> <li>• Develop a detail task performance check list</li> <li>• Perform continuous performance evaluation of the trainees / students by applying the performance check list.</li> </ul>

## **List of module and sub module**

### **Module: 1: Vegetables; preservation; packing containers; and processing tools, materials, equipment, & machines**

- Sub module: 1: Familiarization with vegetables
- Sub module: 2: Applying principles of preservation
- Sub module: 3: Containers for packing
- Sub module: 4: Processing tools, materials, equipment & machines

### **Module: 2: Processing of specific vegetables**

- Sub module: 1: Processing of peeled tomatoes
- Sub module: 2: Processing of tomatoes pulp
- Sub module: 3: Processing of dried carrots
- Sub module: 4: Processing of dried/dehydrated potatoes
- Sub module: 5: Processing of dried/dehydrated leeks
- Sub module: 6: Processing of dried onion
- Sub module: 7: Processing of dried tomatoes
- Sub module: 8: Processing of tomato juice
- Sub module: 9: Processing of tomato ketchup/sauce
- Sub module: 10: Processing of dried green beans
- Sub module: 11: Processing of dried okra
- Sub module: 12: Processing of dried cabbage

### **Module: 3: Bottling and canning of vegetables**

- Sub module: 1: General methods of bottling and canning of vegetables
- Sub module: 2: Canning and bottling of different vegetables

### **Module: 4: Chutneys, sauces and pickles**

### **Module: 5: Tomato products**

- Sub module: 1: Tomato juice
- Sub module: 2: Tomato ketchup
- Sub module: 3: Tomato sauce

### **Module: 6: Drying and dehydration of vegetables**

### **Module: 7: Storage of vegetables**

### **Module: 8: Managing processing activities/unit and marketing**

- Sub module: 1: Vegetable processing activities
- Sub module: 2: Vegetable processing unit
- Sub module: 3: Marketing

### Details of modules and sub modules

<b>Module:1: Vegetables; preservation; packing containers; and processing tools, materials, equipment, &amp; machines</b>						
	<b>Description:</b> It deals with the knowledge and skills related to the introduction of vegetables; application of the principles of food preservation; identification / handling/care/management of packing containers and processing tools, materials, equipment & machines necessary for a vegetable processing.					
	<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To be familiar with vegetables</li> <li>▪ To apply principles of preservation</li> <li>▪ To identify/handle containers for packing</li> </ul>					
	<b>Sub modules:</b> 1. Familiarization with vegetables 2. Applying principles of preservation 3. Containers for packing					
	<b>Sub module:1: Familiarization with vegetables</b>					
	<b>Description:</b> It deals with the knowledge and skills related to the introduction to / familiarization with vegetables necessary for vegetable processing.					
	<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To be familiar with the concept of vegetables</li> <li>▪ To classify vegetables</li> <li>▪ To identify vegetables</li> <li>▪ To state nutritive value of vegetables</li> <li>▪ To enlist vegetable(s) sources of / rich in vitamins</li> <li>▪ To enlist vegetable(s) sources of / rich in minerals</li> <li>▪ To enlist vegetable(s) sources of / rich in proteins</li> <li>▪ To enlist vegetable(s) sources of / rich in carbohydrates</li> <li>▪ To state economic value of vegetables</li> <li>▪ To state aesthetic value of vegetables</li> </ul>					
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
			2 hrs + 3 hrs = 5 hrs		Time(Hrs.)	
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.
1.	Be familiar with the concept of vegetables		<u>Being familiar with the concept of vegetables:</u> <ul style="list-style-type: none"> <li>• Definition/concept of vegetables</li> <li>• Importance and need of vegetables</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
2.	Classify vegetables		<u>Classifying vegetables:</u> <ul style="list-style-type: none"> <li>• Concept, need and importance of classifying vegetables</li> <li>• Systems of classifying vegetables</li> </ul>	0.2	0.3	0.5

		<ul style="list-style-type: none"> <li>• Principle and procedures for classifying vegetables</li> <li>• Classification of vegetables</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
3.	Identify vegetables	<u>Identifying vegetables:</u> <ul style="list-style-type: none"> <li>• Common vegetables</li> <li>• Identification of the vegetables</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
4.	State nutritive value of vegetables	<u>Stating nutritive value of vegetables:</u> <ul style="list-style-type: none"> <li>• Concept of nutritive value of vegetables</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
5.	Enlist vegetable(s) sources of / rich in vitamins	<u>Enlisting vegetable(s) sources of / rich in vitamins:</u> <ul style="list-style-type: none"> <li>• Concept/definition/importance of vitamins</li> <li>• Concept of sources of vitamins</li> <li>• Enlisting vegetable(s) sources of / rich in vitamins</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
6.	Enlist vegetable(s) sources of / rich in minerals	<u>Enlisting vegetable(s) sources of / rich in minerals:</u> <ul style="list-style-type: none"> <li>• Concept/definition/importance of minerals</li> <li>• Concept of sources of minerals</li> <li>• Enlisting vegetable(s) sources of / rich in minerals</li> </ul>	0.2	0.3	0.5

		<ul style="list-style-type: none"> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
7.	Enlist vegetable(s) sources of / rich in proteins	<u>Enlisting vegetable(s) sources of / rich in proteins:</u> <ul style="list-style-type: none"> <li>• Concept/definition/importance of proteins</li> <li>• Concept of sources of proteins</li> <li>• Enlisting vegetable(s) sources of / rich in proteins</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
8.	Enlist vegetable(s) sources of / rich in carbohydrates	<u>Enlisting vegetable(s) sources of / rich in carbohydrates:</u> <ul style="list-style-type: none"> <li>• Concept/definition/importance of carbohydrates</li> <li>• Concept of sources of carbohydrates</li> <li>• Enlisting vegetable(s) sources of / rich in carbohydrates</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
9.	State	<u>Stating economic value of vegetables:</u> <ul style="list-style-type: none"> <li>• Concept of economic value of vegetables</li> <li>• Stating economic value of vegetables</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.3	0.5
10.	State aesthetic value of vegetables	<u>Stating aesthetic value of vegetables:</u> <ul style="list-style-type: none"> <li>• Concept of aesthetic value of vegetables</li> <li>• Stating aesthetic value of vegetables</li> </ul>	0.2	0.3	0.5

		<ul style="list-style-type: none"> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>				
			Sub total:	2	3	5
<b>Sub module:2: Applying principles of preservation</b>						
<b>Description:</b> It deals with the knowledge and skills related to the application of the principles of food preservation necessary for vegetable processing.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To apply principle of delaying the growth of micro-organisms</li> <li>▪ To apply principle of asepsis / keeping out the micro-organisms</li> <li>▪ To apply principle of removal of micro-organisms</li> <li>▪ To apply principle of high temperature preservation</li> <li>▪ To apply principle of sterilization</li> <li>▪ To apply principle of pasteurization</li> <li>▪ To apply principle of blanching</li> <li>▪ To apply principle of low temperature preservation</li> <li>▪ To apply principle of cold storage</li> <li>▪ To apply principle of freezing storage</li> <li>▪ To apply principle of sugared preservation</li> <li>▪ To apply principle of salted preservation</li> <li>▪ To apply principle of chemical preservation</li> <li>▪ To apply principle of sulphur dioxide preservation</li> <li>▪ To apply principle of sodium benzoate preservation</li> <li>▪ To apply principle of preservation by fermentation</li> <li>▪ To apply principle of fermentation of fruit juice</li> <li>▪ To apply principle of fermentation to vinegar</li> <li>▪ To apply principle of distillation</li> <li>▪ To apply principle of preservation by drying</li> <li>▪ To apply mechanism of preservation by drying</li> <li>▪ To apply principle of sun drying</li> <li>▪ To apply principle of artificial drying</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
		<b>3 hrs + 2 hrs = 5 hrs</b>		Time(Hrs.)		
SN	Tasks	Related technical knowledge		Th.	Pr.	Tot.
1.	Apply principle of delaying the growth of micro-organisms	<u>Applying principle of delaying the growth of micro-organisms:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of delaying the growth of micro-organisms</li> <li>• Application of the principle of delaying the growth of micro-organisms</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while</li> </ul>		0.2	0.08	0.28

		performing this task			
2.	Apply principle of asepsis / keeping out the micro-organisms	<u>Applying principle of asepsis / keeping out the micro-organisms:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of asepsis / keeping out the micro-organisms</li> <li>• Application of the principle of asepsis / keeping out the micro-organisms</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.08	0.28
3.	Apply principle of removal of micro-organisms	<u>Applying principle of removal of micro-organisms:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of removal of micro-organisms</li> <li>• Application of the principle of removal of micro-organisms</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.08	0.28
4.	Apply principle of high temperature preservation	<u>Applying principle of high temperature preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of high temperature preservation</li> <li>• Application of the principle of high temperature preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.08	0.28
5.	Apply principle of sterilization	<u>Applying principle of sterilization:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of sterilization</li> <li>• Application of the principle of sterilization</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while</li> </ul>	0.2	0.08	0.28

		performing this task			
6.	Apply principle of pasteurization	<u>Applying principle of pasteurization:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of pasteurization</li> <li>• Application of the principle of pasteurization</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.08	0.28
7.	Apply principle of blanching	<u>Applying principle of blanching:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of blanching</li> <li>• Application of the principle of blanching</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.2	0.08	0.28
8.	Apply principle of low temperature preservation	<u>Apply principle of low temperature preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of low temperature preservation</li> <li>• Application of the principle of low temperature preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
9.	Apply principle of cold storage	<u>Applying principle of cold storage:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of cold storage</li> <li>• Application of the principle of cold storage</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
10.	Apply principle of freezing storage	<u>Applying principle of freezing storage:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of freezing storage</li> </ul>	0.1	0.09	0.19

		<ul style="list-style-type: none"> <li>• Application of the principle of freezing storage</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
11.	Apply principle of sugared preservation	<u>Applying principle of sugared preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of sugared preservation</li> <li>• Application of the principle of sugared preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
12.	Apply principle of salted preservation	<u>Applying principle of salted preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of salted preservation</li> <li>• Application of the principle of salted preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
13.	Apply principle of chemical preservation	<u>Applying principle of chemical preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of chemical preservation</li> <li>• Application of the principle of chemical preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
14.	Apply principle of sulphur dioxide preservation	<u>Applying principle of sulphur dioxide preservation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of sulphur dioxide preservation</li> <li>• Application of the principle of sulphur dioxide preservation</li> <li>• Precautions to be taken while</li> </ul>	0.1	0.09	0.19

		<p>performing this task</p> <ul style="list-style-type: none"> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
15.	Apply principle of sodium benzoate preservation	<p><u>Applying principle of sodium benzoate preservation:</u></p> <ul style="list-style-type: none"> <li>• Concept of the principle of sodium benzoate preservation</li> <li>• Application of the principle of sodium benzoate preservation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
16.	Apply principle of preservation by fermentation	<p><u>Applying principle of preservation by fermentation:</u></p> <ul style="list-style-type: none"> <li>• Concept of the principle of preservation by fermentation</li> <li>• Application of the principle of preservation by fermentation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
17.	Apply principle of fermentation of juice	<p><u>Applying principle of fermentation of juice:</u></p> <ul style="list-style-type: none"> <li>• Concept of the principle of fermentation of juice</li> <li>• Application of the principle of fermentation of juice</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
18.	Apply principle of fermentation to vinegar	<p><u>Applying principle of fermentation to vinegar:</u></p> <ul style="list-style-type: none"> <li>• Concept of the principle of fermentation to vinegar</li> <li>• Application of the principle of fermentation to vinegar</li> <li>• Precautions to be taken while performing this task</li> </ul>	0.1	0.09	0.19

			<ul style="list-style-type: none"> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
19.	Apply principle of distillation		<u>Applying principle of distillation:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of distillation</li> <li>• Application of the principle of distillation</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
20.	Apply principle of preservation by drying		<u>Apply principle of preservation by drying:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of preservation by drying</li> <li>• Application of the principle of preservation by drying</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
21.	Apply mechanism of preservation by drying		<u>Applying mechanism of preservation by drying:</u> <ul style="list-style-type: none"> <li>• Concept of the mechanism of preservation by drying</li> <li>• Application of the mechanism of preservation by drying</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
22.	Apply principle of sun drying		<u>Applying principle of sun drying:</u> <ul style="list-style-type: none"> <li>• Concept of the principle of sun drying</li> <li>• Application of the principle of sun drying</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.1	0.09	0.19
23.	Apply principle of artificial drying		<u>Applying principle of artificial drying:</u>	0.1	0.09	0.19

		<ul style="list-style-type: none"> <li>• Concept of the principle of artificial drying</li> <li>• Application of the principle of artificial drying</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
		Sub total:	3	2	5
<b>Sub module:3: Containers for packing</b>					
<b>Description:</b> It deals with the knowledge and skills related to the identification, handling, care/maintenance and management of containers for packing processed vegetable products.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To manage/handle/maintain tin containers</li> <li>▪ To perform lacouering</li> <li>▪ To manage/handle/maintain glass containers</li> <li>▪ To manage/handle polyethylene [PE] packaging materials</li> <li>▪ To manage/handle polypropylene [PP] packaging materials</li> <li>▪ To manage/handle paper packaging materials</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 4 hrs = 6 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Manage/handle/maintain tin containers	<u>Managing /handling/maintaining tin containers:</u> <ul style="list-style-type: none"> <li>• Concept and types of tin containers</li> <li>• Identification of tin containers</li> <li>• Uses of tin containers</li> <li>• Managing tin containers</li> <li>• Handling tin containers</li> <li>• Care/maintenance of tin containers</li> <li>• Safety/precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.4	0.6	1.0
2.	Perform lacouering	<u>Performing lacouering:</u> <ul style="list-style-type: none"> <li>• Concept and need of lacouering</li> <li>• Principle and procedures for lacouering</li> <li>• Performing lacouering</li> <li>• Safety/precautions to be</li> </ul>	0.4	0.6	1.0

		<p>taken while performing this task</p> <ul style="list-style-type: none"> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
3.	Manage/handle/maintain glass containers	<p><u>Managing /handling/maintaining glass containers:</u></p> <ul style="list-style-type: none"> <li>• Concept and types of glass containers</li> <li>• Identification of glass containers</li> <li>• Uses of glass containers</li> <li>• Managing glass containers</li> <li>• Handling glass containers</li> <li>• Care of glass containers</li> <li>• Safety/precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.3	0.7	1.0
4.	Manage/handle polyethylene [PE] packaging materials	<p><u>Managing /handling polyethylene [PE] packaging materials:</u></p> <ul style="list-style-type: none"> <li>• Concept and types of polyethylene [PE] packaging materials</li> <li>• Identification of polyethylene [PE] packaging materials</li> <li>• Uses of polyethylene [PE] packaging materials</li> <li>• Managing polyethylene [PE] packaging materials</li> <li>• Handling polyethylene [PE] packaging materials</li> <li>• Care of polyethylene [PE] packaging materials</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.3	0.7	1.0
5.	Manage/handle polypropylene [PP] packaging materials	<p><u>Managing /handling polypropylene [PP] packaging materials:</u></p> <ul style="list-style-type: none"> <li>• Concept and types of polypropylene [PP] packaging materials</li> <li>• Identification of</li> </ul>	0.3	0.7	1.0

			polypropylene [PP] packaging materials			
			<ul style="list-style-type: none"> <li>• Uses of polypropylene [PP] packaging materials</li> <li>• Managing polypropylene [PP] packaging materials</li> <li>• Handling polypropylene [PP] packaging materials</li> <li>• Care of polypropylene [PP] packaging materials</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
6.	Manage/handle paper packaging materials		<u>Managing /handling paper packaging materials:</u> <ul style="list-style-type: none"> <li>• Concept and types of paper packaging materials</li> <li>• Identification of paper packaging materials</li> <li>• Uses of paper packaging materials</li> <li>• Managing paper packaging materials</li> <li>• Handling paper packaging materials</li> <li>• Care of paper packaging materials</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.3	0.7	1.0
			Sub total:	2	4	6
<b>Sub module:4: Processing tools, materials, equipment &amp; machines</b>						
<b>Description:</b> It deals with the knowledge and skills related to the identification, handling, care and maintenance of vegetable processing tools, materials, equipment & machines.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To identify vegetable processing tools, materials, equipment &amp; machines</li> <li>▪ To handle vegetable processing tools, materials, equipment &amp; machines</li> <li>▪ To care for vegetable processing tools, materials, equipment &amp; machines</li> <li>▪ To maintain vegetable processing tools, materials, equipment &amp; machines</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			<b>2 hrs + 8 hrs = 10 hrs</b>	Time(Hrs.)		
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.
1.	Manage/handle vegetables		<u>Managing /handling vegetables:</u>	0.05	0.06	0.11

		<ul style="list-style-type: none"> <li>• Concept of vegetables</li> <li>• Identification of vegetables</li> <li>• Uses of vegetables</li> <li>• Handling of vegetables</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
2.	Manage/handle vegetable preservatives	<u>Managing /handling vegetable preservatives:</u> <ul style="list-style-type: none"> <li>• Concept of vegetable preservatives</li> <li>• Identification of vegetable preservatives</li> <li>• Function/uses of vegetable preservatives</li> <li>• Handling of vegetable preservatives</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.05	0.06	0.11
3.	Manage/handle coloring materials	<u>Managing /handling coloring materials:</u> <ul style="list-style-type: none"> <li>• Concept of coloring materials</li> <li>• Identification of coloring materials</li> <li>• Function/uses of coloring materials</li> <li>• Handling of coloring materials</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.05	0.06	0.11
4.	Manage/handle/ maintain water filters	<u>Managing/ handling/ maintaining water filters:</u> <ul style="list-style-type: none"> <li>• Concept of water filters</li> <li>• Identification of water filters</li> <li>• Function/uses of water filters</li> <li>• Handling of water filters</li> <li>• Care/ maintenance of water filters</li> <li>• Precautions to be taken while</li> </ul>	0.05	0.17	0.22

		<p>performing this task</p> <ul style="list-style-type: none"> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
5.	Manage/handle/ maintain peeling knife	<p><u>Managing /handling/ maintaining peeling knife:</u></p> <ul style="list-style-type: none"> <li>• Concept of peeling knife</li> <li>• Identification of peeling knife</li> <li>• Function/uses of peeling knife</li> <li>• Handling of peeling knife</li> <li>• Care/ maintenance of peeling knife</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
6.	Manage/handle/ maintain can opener / cork remover	<p><u>Managing /handling/ maintaining can opener / cork remover:</u></p> <ul style="list-style-type: none"> <li>• Concept of can opener / cork remover</li> <li>• Identification of can opener / cork remover</li> <li>• Function/uses of can opener / cork remover</li> <li>• Handling of</li> <li>• Care/ maintenance of can opener / cork remover</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
7.	Manage/handle/ maintain core remover	<p><u>Managing /handling/ maintaining core remover:</u></p> <ul style="list-style-type: none"> <li>• Concept of core remover</li> <li>• Identification of core remover</li> <li>• Function/uses of core remover</li> <li>• Handling of core remover</li> <li>• Care/ maintenance of core remover</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the</li> </ul>	0.04	0.17	0.21

			activities carried out while performing this task			
8.	Manage/handle/ maintain cutting knife		<u>Managing /handling/ maintaining cutting knife:</u> <ul style="list-style-type: none"> <li>• Concept of cutting knife</li> <li>• Identification of cutting knife</li> <li>• Function/uses of cutting knife</li> <li>• Handling of cutting knife</li> <li>• Care/ maintenance of cutting knife</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
9.	Manage/handle/ maintain pitting knife		<u>Managing/ handling/ maintaining pitting knife:</u> <ul style="list-style-type: none"> <li>• Concept of pitting knife</li> <li>• Identification of pitting knife</li> <li>• Function/uses of pitting knife</li> <li>• Handling of pitting knife</li> <li>• Care/ maintenance of pitting knife</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
10.	Manage/handle/ maintain corer / seed remover		<u>Managing /handling/ maintaining corer / seed remover:</u> <ul style="list-style-type: none"> <li>• Concept of corer / seed remover</li> <li>• Identification of corer / seed remover</li> <li>• Function/uses of corer / seed remover</li> <li>• Handling of</li> <li>• Care/ maintenance of corer / seed remover</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
11.	Manage/handle/ maintain can sealer		<u>Managing /handling/ maintaining</u>	0.04	0.17	0.21

		<u>can sealer:</u> <ul style="list-style-type: none"> <li>• Concept of can sealer</li> <li>• Identification of can sealer</li> <li>• Function/uses of can sealer</li> <li>• Handling of can sealer</li> <li>• Care/ maintenance of can sealer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
12.	Manage/handle/ maintain bottle sealer	<u>Managing /handling/ maintaining bottle sealer:</u> <ul style="list-style-type: none"> <li>• Concept of bottle sealer</li> <li>• Identification of bottle sealer</li> <li>• Function/uses of bottle sealer</li> <li>• Handling of bottle sealer</li> <li>• Care/ maintenance of bottle sealer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
13.	Manage/handle/ maintain pressure cooker with pressure gauge	<u>Managing /handling/ maintaining pressure cooker with pressure gauge:</u> <ul style="list-style-type: none"> <li>• Concept of pressure cooker with pressure gauge</li> <li>• Identification of pressure cooker with pressure gauge</li> <li>• Function/uses of pressure cooker with pressure gauge</li> <li>• Handling of pressure cooker with pressure gauge</li> <li>• Care/ maintenance of pressure cooker with pressure gauge</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
14.	Manage/handle/ maintain hand pulpers	<u>Managing /handling/ maintaining hand pulpers:</u>	0.04	0.17	0.21

		<ul style="list-style-type: none"> <li>• Concept of hand pulpers</li> <li>• Identification of hand pulpers</li> <li>• Function/uses of hand pulpers</li> <li>• Handling of hand pulpers</li> <li>• Care/ maintenance of hand pulpers</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
15.	Manage/handle/ maintain electric pulper / pulping machine	<u>Managing /handling/ maintaining electric pulper / pulping machine:</u> <ul style="list-style-type: none"> <li>• Concept of electric pulper / pulping machine</li> <li>• Identification of electric pulper / pulping machine</li> <li>• Function/uses of electric pulper / pulping machine</li> <li>• Handling of electric pulper / pulping machine</li> <li>• Care/ maintenance of electric pulper / pulping machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
16.	Manage/handle/ maintain steam jacketed kettle	<u>Managing/ handling/ maintaining steam jacketed kettle:</u> <ul style="list-style-type: none"> <li>• Concept of steam jacketed kettle</li> <li>• Identification of steam jacketed kettle</li> <li>• Function/uses of steam jacketed kettle</li> <li>• Handling of steam jacketed kettle</li> <li>• Care/ maintenance of steam jacketed kettle</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21

17.	Manage/handle/ maintain refractometer	<u>Managing /handling/ maintaining refractometer:</u> <ul style="list-style-type: none"> <li>• Concept of refractometer</li> <li>• Identification of refractometer</li> <li>• Function/uses of refractometer</li> <li>• Handling of refractometer</li> <li>• Care/ maintenance of refractometer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
18.	Manage/handle/ maintain thermometer / jelly thermometer	<u>Managing /handling/ maintaining thermometer / jelly thermometer:</u> <ul style="list-style-type: none"> <li>• Concept of thermometer / jelly thermometer</li> <li>• Identification of thermometer / jelly thermometer</li> <li>• Function/uses of thermometer / jelly thermometer</li> <li>• Handling of thermometer / jelly thermometer</li> <li>• Care/ maintenance of thermometer / jelly thermometer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
19.	Manage/handle/ maintain basket press	<u>Managing /handling/ maintaining basket press:</u> <ul style="list-style-type: none"> <li>• Concept of basket press</li> <li>• Identification of basket press</li> <li>• Function/uses of basket press</li> <li>• Handling of basket press</li> <li>• Care/ maintenance of basket press</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the</li> </ul>	0.04	0.17	0.21

			activities carried out while performing this task			
20.	Manage/handle/ maintain crown corking machine		<u>Managing /handling/ maintaining crown corking machine:</u> <ul style="list-style-type: none"> <li>• Concept of crown corking machine</li> <li>• Identification of crown corking machine</li> <li>• Function/uses of crown corking machine</li> <li>• Handling of crown corking machine</li> <li>• Care/ maintenance of crown corking machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
21.	Manage/handle/ maintain fermentation bung		<u>Managing /handling/ maintaining fermentation bung:</u> <ul style="list-style-type: none"> <li>• Concept of fermentation bung</li> <li>• Identification of fermentation bung</li> <li>• Function/uses of fermentation bung</li> <li>• Handling of fermentation bung</li> <li>• Care/ maintenance of fermentation bung</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
22.	Manage/handle/ maintain vinegar generator		<u>Managing /handling/ maintaining vinegar generator:</u> <ul style="list-style-type: none"> <li>• Concept of vinegar generator</li> <li>• Identification of vinegar generator</li> <li>• Function/uses of vinegar generator</li> <li>• Handling of vinegar generator</li> <li>• Care/ maintenance of vinegar generator</li> </ul>	0.04	0.17	0.21

		<ul style="list-style-type: none"> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
23.	Manage/handle funnel	<u>Managing /handling funnel:</u> <ul style="list-style-type: none"> <li>• Concept of funnel</li> <li>• Identification of funnel</li> <li>• Function/uses of funnel</li> <li>• Handling of funnel</li> <li>• Care/ maintenance of funnel</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
24.	Manage/handle/ maintain plastic tubes and clamps	<u>Managing /handling/ maintaining plastic tubes and clamps:</u> <ul style="list-style-type: none"> <li>• Concept of plastic tubes and clamps</li> <li>• Identification of plastic tubes and clamps</li> <li>• Function/uses of plastic tubes and clamps</li> <li>• Handling of plastic tubes and clamps</li> <li>• Care of plastic tubes and clamps</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
25.	Manage/handle bottles	<u>Managing /handling bottles:</u> <ul style="list-style-type: none"> <li>• Concept of bottles</li> <li>• Identification of bottles</li> <li>• Function/uses of bottles</li> <li>• Handling of bottles</li> <li>• Care of bottles</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
26.	Manage/handle caps	<u>Managing /handling caps:</u> <ul style="list-style-type: none"> <li>• Concept of caps</li> <li>• Identification of caps</li> </ul>	0.04	0.17	0.21

		<ul style="list-style-type: none"> <li>• Function/uses of caps</li> <li>• Handling of caps</li> <li>• Care of caps</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
27.	Manage/handle/ maintain water cans	<u>Managing /handling/ maintaining water cans:</u> <ul style="list-style-type: none"> <li>• Concept of water cans</li> <li>• Identification of water cans</li> <li>• Function/uses of water cans</li> <li>• Handling of water cans</li> <li>• Care/ maintenance of water cans</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
28.	Manage/handle/ maintain capping machine	<u>Managing /handling/ maintaining capping machine:</u> <ul style="list-style-type: none"> <li>• Concept of capping machine</li> <li>• Identification of capping machine</li> <li>• Function/uses of capping machine</li> <li>• Handling of capping machine</li> <li>• Care/ maintenance of capping machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
29.	Manage/handle gloves	<u>Managing /handling gloves:</u> <ul style="list-style-type: none"> <li>• Concept of gloves</li> <li>• Identification of gloves</li> <li>• Function/uses of gloves</li> <li>• Handling of gloves</li> <li>• Care of gloves</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21

30.	Manage/handle/ maintain peeler / slicer machine	<u>Managing /handling/ maintaining peeler / slicer machine:</u> <ul style="list-style-type: none"> <li>• Concept of peeler / slicer machine</li> <li>• Identification of peeler / slicer machine</li> <li>• Function/uses of peeler / slicer machine</li> <li>• Handling of</li> <li>• Care/ maintenance of peeler / slicer machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
31.	Manage/handle/ maintain Hand peeler	<u>Managing /handling/ maintaining Hand peeler:</u> <ul style="list-style-type: none"> <li>• Concept of Hand peeler</li> <li>• Identification of Hand peeler</li> <li>• Function/uses of Hand peeler</li> <li>• Handling of Hand peeler</li> <li>• Care/ maintenance of Hand peeler</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
32.	Manage/handle Glass / liter measure / 5 liter jerkin	<u>Managing/handling Glass / liter measure / 5 liter jerkin:</u> <ul style="list-style-type: none"> <li>• Concept of Glass / liter measure / 5 liter jerkin</li> <li>• Identification of Glass / liter measure / 5 liter jerkin</li> <li>• Function/uses of Glass / liter measure / 5 liter jerkin</li> <li>• Handling of Glass / liter measure / 5 liter jerkin</li> <li>• Care of Glass / liter measure / 5 liter jerkin</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21

33.	Manage/handle Filtering cloth	<u>Managing /handling Filtering cloth:</u> <ul style="list-style-type: none"> <li>• Concept of Filtering cloth</li> <li>• Identification of Filtering cloth</li> <li>• Function/uses of Filtering cloth</li> <li>• Handling of Filtering cloth</li> <li>• Care of Filtering cloth</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
34.	Manage/handle sieve	<u>Managing /handling sieve:</u> <ul style="list-style-type: none"> <li>• Concept of sieve</li> <li>• Identification of sieve</li> <li>• Function/uses of sieve</li> <li>• Handling of sieve</li> <li>• Care of sieve</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
35.	Manage/handle Rods	<u>Managing /handling Rods:</u> <ul style="list-style-type: none"> <li>• Concept of Rods</li> <li>• Identification of Rods</li> <li>• Function/uses of Rods</li> <li>• Handling of Rods</li> <li>• Care of Rods</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
36.	Manage/handle/ maintain sulphuring cabinets	<u>Managing /handling/ maintaining sulphuring cabinets:</u> <ul style="list-style-type: none"> <li>• Concept of sulphuring cabinets</li> <li>• Identification of sulphuring cabinets</li> <li>• Function/uses of sulphuring cabinets</li> <li>• Handling of sulphuring cabinets</li> <li>• Care of sulphuring cabinets</li> </ul>	0.04	0.17	0.21

		<ul style="list-style-type: none"> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
37.	Manage/handle/ maintain fillers	<u>Managing/ handling/ maintaining fillers:</u> <ul style="list-style-type: none"> <li>• Concept of fillers</li> <li>• Identification of fillers</li> <li>• Function/uses of fillers</li> <li>• Handling of fillers</li> <li>• Care/ maintenance of fillers</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
38.	Manage/handle/ maintain pasteurization container / equipment	<u>Managing /handling/ maintaining pasteurization container / equipment:</u> <ul style="list-style-type: none"> <li>• Concept of pasteurization container / equipment</li> <li>• Identification of pasteurization container / equipment</li> <li>• Function/uses of pasteurization container / equipment</li> <li>• Handling of pasteurization container / equipment</li> <li>• Care/ maintenance of pasteurization container / equipment</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
39.	Manage/handle/ maintain bottle washing tools / equipment	<u>Managing /handling/ maintaining bottle washing tools / equipment:</u> <ul style="list-style-type: none"> <li>• Concept of bottle washing tools / equipment</li> <li>• Identification of bottle washing tools / equipment</li> <li>• Function/uses of bottle washing tools / equipment</li> <li>• Handling of bottle washing</li> </ul>	0.04	0.17	0.21

		<p>tools / equipment</p> <ul style="list-style-type: none"> <li>• Care/ maintenance of bottle washing tools / equipment</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
40.	Manage/handle/ maintain sterilizers	<p><u>Managing /handling/ maintaining sterilizers:</u></p> <ul style="list-style-type: none"> <li>• Concept of sterilizers</li> <li>• Identification of sterilizers</li> <li>• Function/uses of sterilizers</li> <li>• Handling of sterilizers</li> <li>• Care/ maintenance of sterilizers</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
41.	Manage/handle/ maintain capping machine	<p><u>Manage/handle/ maintain capping machine:</u></p> <ul style="list-style-type: none"> <li>• Concept of capping machine</li> <li>• Identification of capping machine</li> <li>• Function/uses of capping machine</li> <li>• Handling of capping machine</li> <li>• Care/ maintenance of capping machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
42.	Manage/handle/ maintain jar sealer	<p><u>Managing /handling/ maintaining jar sealer:</u></p> <ul style="list-style-type: none"> <li>• Concept of jar sealer</li> <li>• Identification of jar sealer</li> <li>• Function/uses of jar sealer</li> <li>• Handling of jar sealer</li> <li>• Care of jar sealer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while</li> </ul>	0.04	0.17	0.21

		performing this task			
43.	Manage/handle/ maintain air lock	<u>Managing /handling/ maintaining air lock:</u> <ul style="list-style-type: none"> <li>• Concept of air lock</li> <li>• Identification of air lock</li> <li>• Function/uses of air lock</li> <li>• Handling of air lock</li> <li>• Care of air lock</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
44.	Manage/handle/ maintain hydrometer	<u>Managing /handling/ maintaining hydrometer:</u> <ul style="list-style-type: none"> <li>• Concept of hydrometer</li> <li>• Identification of hydrometer</li> <li>• Function/uses of hydrometer</li> <li>• Handling of hydrometer</li> <li>• Care of hydrometer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
45.	Manage/handle/ maintain corking equipment	<u>Managing /handling/ maintaining corking equipment:</u> <ul style="list-style-type: none"> <li>• Concept of corking equipment</li> <li>• Identification of corking equipment</li> <li>• Function/uses of corking equipment</li> <li>• Handling of</li> <li>• Care/ maintenance of corking equipment</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
46.	Manage/handle/ maintain juice extractor / juicer machine	<u>Managing /handling/ maintaining juice extractor / juicer machine:</u> <ul style="list-style-type: none"> <li>• Concept of juice extractor / juicer machine</li> <li>• Identification of juice extractor / juicer machine</li> </ul>	0.04	0.17	0.21

		<ul style="list-style-type: none"> <li>• Function/uses of juice extractor / juicer machine</li> <li>• Handling of juice extractor / juicer machine</li> <li>• Care/ maintenance of juice extractor / juicer machine</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>			
47.	Manage/handle/ maintain crusher	<u>Managing/ handling/ maintaining crusher:</u> <ul style="list-style-type: none"> <li>• Concept of crusher</li> <li>• Identification of crusher</li> <li>• Function/uses of crusher</li> <li>• Handling of crusher</li> <li>• Care/ maintenance of crusher</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
48.	Manage/handle/ maintain coolers	<u>Managing/ handling/ maintaining coolers:</u> <ul style="list-style-type: none"> <li>• Concept of coolers</li> <li>• Identification of coolers</li> <li>• Function/uses of coolers</li> <li>• Handling of coolers</li> <li>• Care/ maintenance of coolers</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while performing this task</li> </ul>	0.04	0.17	0.21
49.	Manage/handle/ maintain heat sealer	<u>Managing/ handling/ maintaining heat sealer:</u> <ul style="list-style-type: none"> <li>• Concept of heat sealer</li> <li>• Identification of heat sealer</li> <li>• Function/uses of heat sealer</li> <li>• Handling of heat sealer</li> <li>• Care of heat sealer</li> <li>• Precautions to be taken while performing this task</li> <li>• Keeping records of the activities carried out while</li> </ul>	0.04	0.17	0.21

			performing this task			
			Sub total:	2	8	10
<b>Module:2: Processing of specific vegetables</b>						
<b>Description:</b> It deals with the knowledge and skills related to the processing of specific vegetables.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To process peeled tomatoes</li> <li>▪ To process tomatoes pulp</li> <li>▪ To process dried carrots</li> <li>▪ To process dried/dehydrated potatoes</li> <li>▪ To process dried/dehydrated leeks</li> <li>▪ To process dried onion</li> <li>▪ To process dried tomatoes</li> <li>▪ To process tomato juice</li> <li>▪ To process tomato ketchup/sauce</li> <li>▪ To process dried green beans</li> <li>▪ To process dried okra</li> <li>▪ To process dried cabbage</li> </ul>						
<b>Sub modules:</b>						
<ol style="list-style-type: none"> <li>1. Processing of peeled tomatoes</li> <li>2. Processing of tomatoes pulp</li> <li>3. Processing of dried carrots</li> <li>4. Processing of dried/dehydrated potatoes</li> <li>5. Processing of dried/dehydrated leeks</li> <li>6. Processing of dried onion</li> <li>7. Processing of dried tomatoes</li> <li>8. Processing of tomato juice</li> <li>9. Processing of tomato ketchup/sauce</li> <li>10. Processing of dried green beans</li> <li>11. Processing of dried okra</li> <li>12. Processing of dried cabbage</li> </ol>						
<b>Sub module:1: Processing of peeled tomatoes</b>						
<b>Description:</b> It deals with the knowledge and skills related to the processing of peeled tomatoes.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> <li>▪ To carry out sorting</li> <li>▪ To carry out scalding</li> <li>▪ To carry out cooling</li> <li>▪ To carry out peeling</li> <li>▪ To carry out filling</li> <li>▪ To carry out closing</li> <li>▪ To carry out pasteurization</li> <li>▪ To carry out cooling</li> <li>▪ To carry out labeling</li> <li>▪ To carry out storage</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			2 hrs + 5 hrs = 7 hrs	Time(Hrs.)		
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.

1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
3.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
4.	Carry out scalding	<u>Carrying out scalding:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
5.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
6.	Carry out peeling	<u>Carrying out peeling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
7.	Carry out filling	<u>Carrying out filling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.17	0.4	0.57

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
8.	Carry out closing	<u>Carrying out closing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.17	0.4	0.57
9.	Carry out pasteurization	<u>Carrying out pasteurization:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.5	0.66
10.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.5	0.66
11.	Carry out labeling	<u>Carrying out labeling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.4	0.56
12.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.4	0.56
		Sub total:	2	5	7
<b>Sub module:2: Processing of tomatoes pulp</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of tomato pulp.					
<b>Objectives:</b>					
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> </ul>					

	<ul style="list-style-type: none"> <li>▪ To carry out sorting</li> <li>▪ To carry out draining</li> <li>▪ To carry out cutting</li> <li>▪ To carry out extraction</li> <li>▪ To carry out concentration</li> <li>▪ To carry out filling</li> <li>▪ To carry out capping</li> <li>▪ To carry out pasteurization</li> <li>▪ To carry out cooling</li> <li>▪ To carry out labeling</li> <li>▪ To carry out storage</li> </ul>				
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.				
		<b>2 hrs + 6 hrs = 8 hrs</b>			
		Time(Hrs.)			
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
3.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
4.	Carry out draining	<u>Carrying out draining:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
5.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> </ul>	0.16	0.46	0.62

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
6.	Carry out extraction	<u>Carrying out extraction:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
7.	Carry out concentration	<u>Carrying out concentration:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
8.	Carry out filling	<u>Carrying out filling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
9.	Carry out capping	<u>Carrying out capping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
10.	Carry out pasteurization	<u>Carrying out pasteurization:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
11.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
12.	Carry out labeling	<u>Carrying out labeling:</u>	0.15	0.46	0.61

		<ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
13.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
		Sub total:	2	6	8
<b>Sub module:3: Processing of dried carrots</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried carrot.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out cleaning</li> <li>▪ To carry out washing</li> <li>▪ To carry out scraping</li> <li>▪ To carry out control</li> <li>▪ To carry out cutting</li> <li>▪ To carry out blanching</li> <li>▪ To carry out cooling</li> <li>▪ To carry out sulphiting</li> <li>▪ To carry out drying</li> <li>▪ To carry out sorting</li> <li>▪ To carry out control</li> <li>▪ To carry out packaging</li> <li>▪ To carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	Carrying out reception: <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.53	0.68
2.	Carry out cleaning	<u>Carrying out cleaning:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.43	0.58

3.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.42	0.57
4.	Carry out scraping	<u>Carrying out scraping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.42	0.57
5.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
6.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
7.	Carry out blanching	<u>Carrying out blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
8.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
9.	Carry out sulphiting	<u>Carrying out sulphiting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.14	0.42	0.56

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
10.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
11.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
12.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
13.	Carry out packaging	<u>Carrying out packaging:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
14.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
		Sub total:	2	6	8
<b>Sub module:4: Processing of dried/dehydrated potatoes</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried/dehydrated potatoes.					
<b>Objectives:</b>					
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> </ul>					

	<ul style="list-style-type: none"> <li>▪ To carry out temporary storage</li> <li>▪ To carry out washing</li> <li>▪ To carry out rectification</li> <li>▪ To carry out peeling</li> <li>▪ To carry out control and rectification</li> <li>▪ To carry out cutting</li> <li>▪ To carry out blanching and treatment</li> <li>▪ To carry out drying and dehydration</li> <li>▪ To carry out sorting</li> <li>▪ To carry out sieving</li> <li>▪ To carry out control</li> <li>▪ To carry out packaging</li> <li>▪ To carry out storage</li> <li>▪ To carry out shipping</li> </ul>				
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	<b>Time(Hrs.)</b>		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> Concept Procedures Precautions to be taken Records keeping	0.14	0.4	0.54
2.	Carry out temporary storage	<u>Carrying out temporary storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.4	0.54
3.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.4	0.54
4.	Carry out rectification	<u>Carrying out rectification:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.4	0.54
5.	Carry out peeling	<u>Carrying out peeling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.14	0.4	0.54

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
6.	Carry out control and rectification	<u>Carrying out control and rectification:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
7.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
8.	Carry out blanching and treatment	<u>Carrying out blanching and treatment:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
9.	Carry out drying and dehydration	<u>Carrying out drying and dehydration:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
10.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
11.	Carry out sieving	<u>Carrying out sieving:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.13	0.4	0.53

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
12.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
13.	Carry out packaging	<u>Carrying out packaging:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
14.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
15.	Carry out shipping	<u>Carrying out shipping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.13	0.4	0.53
		Sub total:	2	6	8
<b>Sub module:5: Processing of dried/dehydrated leeks</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried / dehydrated leeks.					
<b>Objectives:</b>					
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out temporary storage</li> <li>▪ To carry out washing</li> <li>▪ To carry out rectification</li> <li>▪ To carry out peeling</li> <li>▪ To carry out control and rectification</li> <li>▪ To carry out cutting</li> <li>▪ To carry out blanching and treatment</li> <li>▪ To carry out drying and dehydration</li> </ul>					

	<ul style="list-style-type: none"> <li>▪ To carry out sorting</li> <li>▪ To carry out sieving</li> <li>▪ To carry out control</li> <li>▪ To carry out packaging</li> <li>▪ To carry out storage</li> <li>▪ To carry out shipping</li> </ul>				
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.				
		<b>2 hrs + 6 hrs = 8 hrs</b>			
		Time(Hrs.)			
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
2.	Carry out temporary storage	<u>Carrying out temporary storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
3.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
4.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
5.	Carry out separation	<u>Carrying out separation:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
6.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.15	0.46	0.61

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
7.	Carry out blanching	<u>Carrying out blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
8.	Carry out drying and dehydration	<u>Carrying out drying and dehydration:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
9.	Carry out sorting/ sieving	<u>Carrying out sorting/ sieving:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
10.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
11.	Carry out packaging	<u>Carrying out packaging:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
12.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> </ul>	0.15	0.46	0.61

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
13.	Carry out shipping	<u>Carrying out shipping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
		Sub total:	2	6	8
<b>Sub module:6: Processing of dried onion</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried onion.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out cleaning</li> <li>▪ To carry out size grading</li> <li>▪ To carry out removal of tops, roots and outer leaves</li> <li>▪ To carry out pre-washing</li> <li>▪ To carry out cutting</li> <li>▪ To carry out washing</li> <li>▪ To carry out draining</li> <li>▪ To carry out drying</li> <li>▪ To carry out sorting/ sieving</li> <li>▪ To carry out control</li> <li>▪ To carry out packing</li> <li>▪ To carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
2.	Carry out cleaning	<u>Carrying out cleaning:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.47	0.63
3.	Carry out size grading	<u>Carrying out size grading:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> </ul>	0.16	0.46	0.62

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
4.	Carry out removal of tops, roots and outer leaves	<u>Carrying out removal of tops, roots and outer leaves:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
5.	Carry out pre-washing	<u>Carrying out pre-washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.16	0.46	0.62
6.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
7.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
8.	Carry out draining	<u>Carrying out draining:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
9.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61

10.	Carry out sorting/ sieving	<u>Carrying out sorting/ sieving:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
11.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
12.	Carry out packing	<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
13.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.46	0.61
		Sub total:	2	6	8
<b>Sub module:7: Processing of dried tomatoes</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried tomatoes.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> <li>▪ To carry out trimming</li> <li>▪ To carry out sorting</li> <li>▪ To carry out draining</li> <li>▪ To carry out slicing</li> <li>▪ To carry out drying</li> <li>▪ To carry out packing</li> <li>▪ To carry out labeling</li> <li>▪ To carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
			<b>2 hrs + 6 hrs = 8 hrs</b>		
			Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u>	0.2	0.6	0.8

		<ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
3.	Carry out trimming	<u>Carrying out trimming:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
4.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
5.	Carry out draining	<u>Carrying out draining:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
6.	Carry out slicing	<u>Carrying out slicing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
7.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> </ul>	0.2	0.6	0.8

			<ul style="list-style-type: none"> <li>• Records keeping</li> </ul>			
8.	Carry out packing		<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
9.	Carry out labeling		<u>Carrying out labeling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
10.	Carry out storage		<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
			Sub total:	2	6	8
<b>Sub module:8: Processing of tomato juice</b>						
<b>Description:</b> It deals with the knowledge and skills related to the processing of tomato juice.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> <li>▪ To carry out control</li> <li>▪ To carry out cutting</li> <li>▪ To carry out preheating</li> <li>▪ To carry out juice extraction</li> <li>▪ To carry out refining</li> <li>▪ To carry out concentration</li> <li>▪ To carry out filling</li> <li>▪ To carry out closing</li> <li>▪ To carry out pasteurization</li> <li>▪ To carry out cooling</li> <li>▪ To carry out labeling</li> <li>▪ To carry out storage</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception		<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> </ul>	0.15	0.53	0.68

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.43	0.58
3.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.42	0.57
4.	Carry out cutting	<u>Carrying out cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.15	0.42	0.57
5.	Carry out preheating	<u>Carrying out preheating:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
6.	Carry out juice extraction	<u>Carrying out juice extraction:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
7.	Carry out refining	<u>Carrying out refining:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
8.	Carry out concentration	<u>Carrying out concentration:</u>	0.14	0.42	0.56

		<ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
9.	Carry out filling	<u>Carrying out filling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
10.	Carry out closing	<u>Carrying out closing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
11.	Carry out pasteurization	<u>Carrying out pasteurization:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
12.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
13.	Carry out labeling	<u>Carrying out labeling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.14	0.42	0.56
14.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> </ul>	0.14	0.42	0.56

		<ul style="list-style-type: none"> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>				
			Sub total:	2	6	8
<b>Sub module:9: Processing of tomato ketchup/sauce</b>						
<b>Description:</b> It deals with the knowledge and skills related to the processing of tomato ketchup/sauce.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out sorting</li> <li>▪ To obtain wholesome red tomatoes</li> <li>▪ To carry out soaking and washing</li> <li>▪ To carry out coring and slicing</li> <li>▪ To carry out heating and crushing</li> <li>▪ To carry out pulping</li> <li>▪ To obtain tomato pulp</li> <li>▪ To add spices, sugar, salt, onion, garlic, vinegar, and thickener</li> <li>▪ To carry out cooking and concentration</li> <li>▪ To pass the mass through finisher</li> <li>▪ To add preservatives</li> <li>▪ To carry out filling (in bottles)</li> <li>▪ To carry out low pasteurization</li> <li>▪ To carry out cleaning of the bottles</li> <li>▪ To carry out labeling</li> <li>▪ To carry out packing</li> <li>▪ To carry out marketing</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception		<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.4	0.6
2.	Carry out sorting		<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.4	0.6
3.	Obtain wholesome red tomatoes		<u>Obtaining wholesome red tomatoes:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> </ul>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
4.	Carry out soaking and washing	<u>Carrying out soaking and washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
5.	Carry out coring and slicing	<u>Carrying out coring and slicing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
6.	Carry out heating and crushing	<u>Carrying out heating and crushing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
7.	Carry out pulping	<u>Carrying out pulping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
8.	Obtain tomato pulp	<u>Obtaining tomato pulp:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
9.	Add spices, sugar, salt, onion, garlic, vinegar, and thickener	<u>Adding spices, sugar, salt, onion, garlic, vinegar, and thickener:</u> Concept <ul style="list-style-type: none"> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4

10.	Carry out cooking and concentration	<u>Carrying out cooking and concentration:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
11.	Pass the mass through finisher	<u>Passing the mass through finisher:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
12.	Add preservatives	<u>Adding preservatives:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
13.	Carry out filling (in bottles)	<u>Carrying out filling (in bottles):</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
14.	Carry out low pasteurization	<u>Carrying out low pasteurization:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
15.	Carry out cleaning of the bottles	<u>Carrying out cleaning of the bottles:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
16.	Carry out labeling	<u>Carrying out labeling:</u>	0.1	0.3	0.4

		<ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
17.	Carry out packing	<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
18.	Carry out marketing	<u>Carrying out marketing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
		Sub total:	2	6	8
<b>Sub module:10: Processing of dried green beans</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried green beans.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> <li>▪ To obtain cutting</li> <li>▪ To carry out blanching</li> <li>▪ To carry out cooling</li> <li>▪ To carry out sulphiting</li> <li>▪ To carry out drying</li> <li>▪ To carry out packing</li> <li>▪ To carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.3	0.7	1.0
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.3	0.7	1.0

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
3.	Obtain cutting	<u>Obtaining cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.7	0.9
4.	Carry out blanching	<u>Carrying out blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.7	0.9
5.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.7	0.9
6.	Carry out sulphiting	<u>Carrying out sulphiting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.7	0.9
7.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
8.	Carry out packing	<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> </ul>	0.2	0.6	0.8

		<ul style="list-style-type: none"> <li>• Records keeping</li> </ul>			
9.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
			2	6	8
<b>Sub module:11: Processing of dried okra</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried okra.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To carry out reception</li> <li>▪ To carry out washing</li> <li>▪ To carry out trimming</li> <li>▪ To obtain cutting</li> <li>▪ To carry out blanching</li> <li>▪ To carry out cooling</li> <li>▪ To carry out sulphiting</li> <li>▪ To carry out drying</li> <li>▪ To carry out packing</li> <li>▪ To carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
2.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
3.	Carry out trimming	<u>Carrying out trimming:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
4.	Obtain cutting	<u>Obtaining cutting:</u> <ul style="list-style-type: none"> <li>• Concept</li> </ul>	0.2	0.6	0.8

		<ul style="list-style-type: none"> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
5.	Carry out blanching	<u>Carrying out blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
6.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
7.	Carry out sulphiting	<u>Carrying out sulphiting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
8.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
9.	Carry out packing	<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.6	0.8
10.	Carry out storage	<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> </ul>	0.2	0.6	0.8

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
		Sub total:	2	6	8
<b>Sub module:12: Processing of dried cabbage</b>					
<b>Description:</b> It deals with the knowledge and skills related to the processing of dried cabbage.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To Carry out reception</li> <li>▪ To Carry out temporary storage</li> <li>▪ To Carry out cleaning</li> <li>▪ To Obtain sorting</li> <li>▪ To Carry out removal of outer leaves and cores</li> <li>▪ To Carry out pre-washing</li> <li>▪ To Carry out cutting in quarters</li> <li>▪ To Carry out shredding</li> <li>▪ To Carry out washing</li> <li>▪ To Carry out blanching</li> <li>▪ To Carry out cooling</li> <li>▪ To Carry out sulphiting</li> <li>▪ To Carry out drying</li> <li>▪ To Carry out sorting</li> <li>▪ To Carry out control</li> <li>▪ To Carry out packing</li> <li>▪ To Carry out storage</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>2 hrs + 6 hrs = 8 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out reception	<u>Carrying out reception:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.4	0.6
2.	Carry out temporary storage	<u>Carrying out temporary storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.4	0.6
3.	Carry out cleaning	<u>Carrying out cleaning:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.2	0.4	0.6
4.	Obtain sorting	<u>Obtaining sorting:</u>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
5.	Carry out removal of outer leaves and cores	<u>Carrying out removal of outer leaves and cores:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
6.	Carry out pre-washing	<u>Carrying out pre-washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
7.	Carry out cutting in quarters	<u>Carrying out cutting in quarters:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
8.	Carry out shredding	<u>Carrying out shredding:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
9.	Carry out washing	<u>Carrying out washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
10.	Carry out blanching	<u>Carrying out blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	0.1	0.3	0.4

		<ul style="list-style-type: none"> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
11.	Carry out cooling	<u>Carrying out cooling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
12.	Carry out sulphiting	<u>Carrying out sulphiting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
13.	Carry out drying	<u>Carrying out drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
14.	Carry out sorting	<u>Carrying out sorting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
15.	Carry out control	<u>Carrying out control:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
16.	Carry out packing	<u>Carrying out packing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> </ul>	0.1	0.3	0.4

			<ul style="list-style-type: none"> <li>• Records keeping</li> </ul>			
17.	Carry out storage		<u>Carrying out storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle</li> <li>• Procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.3	0.4
			Sub total:	2	6	8
<b>Module:3: Bottling and canning of vegetables</b>						
<b>Description:</b> It deals with the knowledge and skills related to the bottling and canning of vegetables.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To carry out general methods of bottling and canning of vegetables</li> <li>▪ To carry out canning and bottling of different vegetables</li> </ul>						
<b>Sub modules:</b>						
<ol style="list-style-type: none"> <li>1. General methods of bottling and canning of vegetables</li> <li>2. Canning and bottling of different vegetables</li> </ol>						
<b>Sub module:1: General methods of bottling and canning of vegetables</b>						
<b>Description:</b> It deals with the knowledge and skills related to the general methods of bottling and canning of vegetables.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To perform selection of vegetables</li> <li>▪ To perform sorting and grading</li> <li>▪ To perform washing</li> <li>▪ To perform blanching</li> <li>▪ To perform filling and brining</li> <li>▪ To perform exhausting</li> <li>▪ To perform sealing</li> <li>▪ To perform heat processing</li> <li>▪ To perform cooling</li> <li>▪ To perform labeling and storing</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			<b>1 hrs + 4 hrs = 5 hrs</b>	Time(Hrs.)		
SN	Tasks		Related technical knowledge	Th.	Pr.	Tot.
1.	Perform selection of vegetables		<u>Performing selection of vegetables:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Selection criteria</li> <li>• Principle and procedures</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
2.	Perform sorting and grading		<u>Performing sorting and grading:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing sorting and</li> </ul>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>grading</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
3.	Perform washing	<u>Performing washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing washing</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
4.	Perform blanching	<u>Performing blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing blanching</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
5.	Perform filling and brining	<u>Performing filling and brining:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing filling and brining</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
6.	Perform exhausting	<u>Performing exhausting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing exhausting</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
7.	Perform sealing	<u>Performing sealing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing sealing</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	0.1	0.4	0.5
8.	Perform heat processing	<u>Performing heat processing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing heat processing</li> <li>• Precautions to be taken</li> </ul>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>Records keeping</li> </ul>			
9.	Perform cooling	<u>Performing cooling:</u> <ul style="list-style-type: none"> <li>Concept</li> <li>Need</li> <li>Principle and procedures</li> <li>Performing cooling</li> <li>Precautions to be taken</li> <li>Records keeping</li> </ul>	0.1	0.4	0.5
10.	Perform labeling and storing	<u>Performing labeling and storing:</u> <ul style="list-style-type: none"> <li>Concept</li> <li>Need</li> <li>Principle and procedures</li> <li>Performing labeling and storing</li> <li>Precautions to be taken</li> <li>Records keeping</li> </ul>	0.1	0.4	0.5
		Sub total:	1	4	5
<b>Sub module:2: Canning and bottling of different vegetables</b>					
<b>Description:</b> It deals with the knowledge and skills related to the canning and bottling of different vegetables.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>To can/bottle peas</li> <li>To can/bottle asparagus</li> <li>To can/bottle beans</li> <li>To can/bottle cabbage</li> <li>To can/bottle cauliflower</li> <li>To can/bottle carrot</li> <li>To can/bottle mushroom</li> <li>To can/bottle bamboo shoot</li> <li>To can/bottle tomato</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>9 hrs + 36 hrs = 45 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Can/bottle peas	<u>Canning/bottling peas:</u> <ul style="list-style-type: none"> <li>Concept</li> <li>Need and importance</li> <li>Principle and procedures</li> <li>Performing canning/bottling of peas</li> <li>Precautions to be taken</li> <li>Records keeping</li> </ul>	1	4	5
2.	Can/bottle asparagus	<u>Canning/bottling asparagus:</u> <ul style="list-style-type: none"> <li>Concept</li> <li>Need and importance</li> <li>Principle and procedures</li> <li>Performing canning/bottling</li> </ul>	1	4	5

		<ul style="list-style-type: none"> <li>of asparagus</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
3.	Can/bottle beans	<u>Caning/bottling beans:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of beans</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
4.	Can/bottle cabbage	<u>Caning/bottling cabbage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of cabbage</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
5.	Can/bottle cauliflower	<u>Caning/bottling cauliflower:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of cauliflower</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
6.	Can/bottle carrot	<u>Caning/bottling carrot:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of carrot</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
7.	Can/bottle mushroom	<u>Caning/bottling mushroom:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of mushroom</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
8.	Can/bottle bamboo shoot	<u>Caning /bottling bamboo shoot:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> </ul>	1	4	5

		<ul style="list-style-type: none"> <li>• Principle and procedures</li> <li>• Performing canning/bottling of bamboo shoot</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
9.	Can/bottle tomato	<u>Caning /bottling tomato:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Performing canning/bottling of tomato</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
		Sub total:	9	36	45
<b>Module:4: Chutneys, sauces and pickles</b>					
<b>Description:</b> It deals with the knowledge and skills related to the preparing chutneys, sauces and pickles from various types of vegetables.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To make/prepare tomato chutney</li> <li>▪ To make/prepare tomato sauce</li> <li>▪ To make/prepare dried salted pickle of sauerkraut</li> <li>▪ To make/prepare dried salted pickle of gundruk</li> <li>▪ To make/prepare brined pickle of cucumber</li> <li>▪ To make/prepare brined pickle of onion</li> <li>▪ To make/prepare brined pickle of cauliflower</li> <li>▪ To make/prepare oiled pickle of cucumber</li> <li>▪ To make/prepare oiled pickle of radish</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>9 hrs + 36 hrs = 45 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Make/prepare tomato chutney	<u>Making /preparing tomato chutney:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing tomato chutney</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
2.	Make/prepare tomato sauce	<u>Making /preparing tomato sauce:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing tomato sauce</li> <li>• Precautions to be taken</li> </ul>	1	4	5

		<ul style="list-style-type: none"> <li>• Records keeping</li> </ul>			
3.	Make/prepare dried salted pickle of sauerkraut	<u>Making /preparing dried salted pickle of sauerkraut:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing dried salted pickle of sauerkraut</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
4.	Make/prepare dried salted pickle of gundruk	<u>Making /preparing dried salted pickle of gundruk:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing dried salted pickle of gundruk</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
5.	Make/prepare brined pickle of cucumber	<u>Making /preparing brined pickle of cucumber:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing brined pickle of cucumber</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
6.	Make/prepare brined pickle of onion	<u>Making /preparing brined pickle of onion:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing brined pickle of onion</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5
7.	Make/prepare brined pickle of cauliflower	<u>Making /preparing brined pickle of cauliflower:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing brined pickle of cauliflower</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5

8.	Make/prepare oiled pickle of cucumber	<u>Making /preparing oiled pickle of cucumber:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing oiled pickle of cucumber</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5	
9.	Make/prepare oiled pickle of radish	<u>Making /preparing oiled pickle of radish:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need and importance</li> <li>• Principle and procedures</li> <li>• Making/preparing oiled pickle of radish</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	4	5	
			Sub total:	9	36	45
<b>Module: 5: Tomato products</b>						
<b>Description:</b> It deals with the knowledge and skills related to the processing /making of various types of tomato products.						
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To make tomato juice</li> <li>▪ To make tomato ketchup</li> <li>▪ To make tomato sauce</li> </ul>						
<b>Sub modules:</b> <ol style="list-style-type: none"> <li>1. Tomato juice</li> <li>2. Tomato ketchup</li> <li>3. Tomato sauce</li> </ol>						
<b>Sub module:1: Tomato juice</b>						
<b>Description:</b> It deals with the knowledge and skills related to making of tomato juice.						
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To perform selection of tomato fruit</li> <li>▪ To perform washing</li> <li>▪ To perform trimming</li> <li>▪ To perform crushing</li> <li>▪ To perform pulping</li> <li>▪ To perform extraction of juice</li> <li>▪ To perform addition of salt and sugar</li> <li>▪ To perform bottling or canning</li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
			<b>8 hrs + 24 hrs = 32 hrs</b>		Time(Hrs.)	
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.	
1.	Perform selection of tomato fruit	<u>Performing selection of tomato fruit:</u> <ul style="list-style-type: none"> <li>• Concept</li> </ul>	1	3	4	

		<ul style="list-style-type: none"> <li>• Selection criteria</li> <li>• Principle and procedures</li> <li>• Performing selection of tomato fruit</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
2.	Perform washing	<u>Performing washing:</u> Concept Need Principle and procedures Performing washing Precautions to be taken Records keeping	1	3	4
3.	Perform trimming	<u>Performing trimming:</u> Concept Need Principle and procedures Performing trimming Precautions to be taken Records keeping	1	3	4
4.	Perform crushing	<u>Performing crushing:</u> Concept Need Principle and procedures Performing crushing Precautions to be taken Records keeping	1	3	4
5.	Perform pulping	<u>Performing pulping:</u> Concept Need Principle and procedures Performing pulping Precautions to be taken Records keeping	1	3	4
6.	Perform extraction of juice	<u>Performing extraction of juice:</u> Concept Need Principle and procedures Performing extraction of juice Precautions to be taken Records keeping	1	3	4
7.	Perform addition of salt and sugar	<u>Perform addition of salt and sugar:</u> Concept Need Principle and procedures Performing addition of salt and sugar Precautions to be taken Records keeping	1	3	4

8.	Perform bottling or canning	<u>Performing bottling or canning:</u> Concept Need Principle and procedures Performing bottling or canning Precautions to be taken Records keeping	1	3	4
		Sub total:	8	24	32
<b>Sub module:2: Tomato ketchup</b>					
<b>Description:</b> It deals with the knowledge and skills related to making of tomato ketchup.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To perform selection of tomato fruit</li> <li>▪ To perform washing</li> <li>▪ To perform trimming</li> <li>▪ To perform crushing</li> <li>▪ To perform pulping</li> <li>▪ To extract juice</li> <li>▪ To perform juice standardization</li> <li>▪ To prepare recipe for ketchup (ingredients with their quantity)</li> <li>▪ To perform addition of ingredients</li> <li>▪ To perform cooking and concentration</li> <li>▪ To perform bottling</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>11 hrs + 33 hrs = 44 hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Perform selection of tomato fruit	<u>Performing selection of tomato fruit:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Selection criteria</li> <li>• Principle and procedures</li> <li>• Performing selection of tomato fruit</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
2.	Perform washing	<u>Performing washing:</u> Concept Need Principle and procedures Performing washing Precautions to be taken Records keeping	1	3	4
3.	Perform trimming	<u>Performing trimming:</u> Concept Need Principle and procedures Performing trimming Precautions to be taken Records keeping	1	3	4

4.	Perform crushing	<u>Performing crushing:</u> Concept Need Principle and procedures Performing crushing Precautions to be taken Records keeping	1	3	4
5.	Perform pulping	<u>Performing pulping:</u> Concept Need Principle and procedures Performing pulping Precautions to be taken Records keeping	1	3	4
6.	Extract juice	<u>Extracting juice:</u> Concept Need Principle and procedures Extracting juice Precautions to be taken Records keeping	1	3	4
7.	Perform juice standardization	<u>Performing juice standardization:</u> Concept Need Principle and procedures Performing juice standardization Precautions to be taken Records keeping	1	3	4
8.	Prepare recipe for ketchup (ingredients with their quantity)	<u>Preparing recipe for ketchup (ingredients with their quantity):</u> Concept Need Principle and procedures Preparing recipe for ketchup (ingredients with their quantity) Precautions to be taken Records keeping	1	3	4
9.	Perform addition of ingredients	<u>Performing addition of ingredients:</u> Concept Need Principle and procedures Performing addition of ingredients Precautions to be taken Records keeping	1	3	4
10.	Perform cooking and concentration	<u>Performing cooking and concentration:</u> Concept Need Principle and procedures	1	3	4

		Performing cooking and concentration Precautions to be taken Records keeping			
11.	Perform bottling	<u>Performing bottling:</u> Concept Need Principle and procedures Performing bottling Precautions to be taken Records keeping	1	3	4
		Sub total:	11	33	44
<b>Sub module:3: Tomato sauce</b>					
<b>Description:</b> It deals with the knowledge and skills related to making of tomato sauce.					
<b>Objectives:</b>					
<ul style="list-style-type: none"> <li>▪ To perform selection of tomato fruit</li> <li>▪ To perform washing</li> <li>▪ To perform trimming</li> <li>▪ To perform crushing</li> <li>▪ To perform pulping</li> <li>▪ To extract juice</li> <li>▪ To perform juice standardization</li> <li>▪ To prepare recipe for sauce (ingredients with their quantity)</li> <li>▪ To perform addition of ingredients</li> <li>▪ To perform cooking and concentration</li> <li>▪ To perform bottling</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		11 hrs + 33 hrs = 44 hrs	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Perform selection of tomato fruit	<u>Performing selection of tomato fruit:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Selection criteria</li> <li>• Principle and procedures</li> <li>• Performing selection of tomato fruit</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
2.	Perform washing	<u>Performing washing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing washing</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
3.	Perform trimming	<u>Performing trimming:</u> <ul style="list-style-type: none"> <li>• Concept</li> </ul>	1	3	4

		<ul style="list-style-type: none"> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing trimming</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
4.	Perform crushing	<u>Performing crushing:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing crushing</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
5.	Perform pulping	<u>Performing pulping:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing pulping</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
6.	Extract juice	<u>Extracting juice:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Extracting juice</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
7.	Perform juice standardization	<u>Performing juice standardization:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing juice standardization</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
8.	Prepare recipe for sauce (ingredients with their quantity)	<u>Preparing recipe for sauce (ingredients with their quantity):</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Preparing recipe for sauce (ingredients with their quantity)</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
9.	Perform addition of ingredients	<u>Performing addition of</u>	1	3	4

		<u>ingredients:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing addition of ingredients</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
10.	Perform cooking and concentration	<u>Performing cooking and concentration:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing cooking and concentration</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
11.	Perform bottling	<u>Performing bottling:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing bottling</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	3	4
		Sub total:	11	33	44
<b>Module: 6: Drying and dehydration of vegetables</b>					
<b>Description:</b> It deals with the knowledge and skills related to the drying and dehydration of vegetables.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To perform washing (preparation work)</li> <li>▪ To perform peeling (preparation work)</li> <li>▪ To perform slicing (preparation work)</li> <li>▪ To perform blanching</li> <li>▪ To perform sulphiting</li> <li>▪ To perform drying</li> <li>▪ To prepare schedule of drying of different vegetables</li> </ul>					
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.					
		<b>7 hrs + 14 hrs = 21hrs</b>	Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Perform washing (preparation work)	<u>Performing washing (preparation work):</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing washing (preparation work)</li> </ul>	1	2	3

		<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
2.	Perform peeling (preparation work)	<u>Performing peeling (preparation work):</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing peeling (preparation work)</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
3.	Perform slicing (preparation work)	<u>Performing slicing (preparation work):</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing slicing (preparation work)</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
4.	Perform blanching	<u>Performing blanching:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing blanching</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
5.	Perform sulphiting	<u>Performing sulphiting:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing sulphiting</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
6.	Perform drying	<u>Performing drying:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures</li> <li>• Performing drying</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
7.	Prepare schedule of drying of different vegetables	<u>Preparing schedule of drying of different vegetables:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> </ul>	1	2	3

		<ul style="list-style-type: none"> <li>• Principle and procedures</li> <li>• Preparing schedule of drying of different vegetables</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>				
			Sub total:	7	14	21
<b>Module: 7: Storage of vegetables</b>						
<b>Description:</b> It deals with the knowledge and skills related to the storage of vegetables.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To make cellar storage</li> <li>▪ To perform cellar storage of <b>vegetable</b></li> <li>▪ To make cool chamber</li> <li>▪ To perform cool chamber storage of <b>vegetable</b></li> <li>▪ To perform cold storage of <b>vegetable</b></li> <li>▪ To perform freezing storage of <b>vegetable</b></li> </ul>						
<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.						
		<b>6 hrs + 12 hrs = 18 hrs</b>		Time(Hrs.)		
SN	Tasks	Related technical knowledge		Th.	Pr.	Tot.
1.	Make cellar storage	<u>Making cellar storage:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures for making cellar storage</li> <li>• Making cellar storage</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>		1	2	3
2.	Perform cellar storage of <b>vegetable</b>	<u>Performing cellar storage of vegetable:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures of cellar storage of vegetable</li> <li>• Performing cellar storage of vegetable</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>		1	2	3
3.	Make cool chamber	<u>Making cool chamber:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures for making cellar storage</li> <li>• Making cellar storage</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>		1	2	3
4.	Perform cool chamber storage of	<u>Performing cool chamber storage</u>		1	2	3

	vegetable	of vegetable: <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures of cool chamber storage of vegetable</li> <li>• Performing cool chamber storage of vegetable</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>			
5.	Perform cold storage of vegetable	<u>Performing cold storage of vegetable:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures of cold storage of vegetable</li> <li>• Performing cold storage of vegetable</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
6.	Perform freezing storage of vegetable	<u>Performing freezing storage of vegetable:</u> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Need</li> <li>• Principle and procedures of freezing storage of vegetable</li> <li>• Performing freezing storage of vegetable</li> <li>• Precautions to be taken</li> <li>• Records keeping</li> </ul>	1	2	3
		Sub total:	6	12	18
<b>Module: 8: Managing processing activities/unit and marketing</b>					
<b>Description:</b> It deals with the knowledge and skills related to the management of processing activities/unit and marketing of processed vegetable products.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To manage vegetable processing activities</li> <li>▪ To manage vegetable processing unit</li> <li>▪ To market processed vegetable products</li> </ul>					
<b>Sub modules:</b> 1. Vegetable processing activities 2. Vegetable processing unit 3. Marketing					
<b>Sub module: 1: Vegetable processing activities</b>					
<b>Description:</b> It deals with the knowledge and skills related to the vegetable processing activities.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To plan for vegetable processing activities</li> <li>▪ To budget vegetable processing activities</li> </ul>					

	<ul style="list-style-type: none"> <li>▪ To organize <b>vegetable</b> processing activities</li> <li>▪ To direct <b>vegetable</b> processing activities</li> <li>▪ To control <b>vegetable</b> processing activities</li> <li>▪ To manage wastages</li> <li>▪ To communicate with others</li> <li>▪ To develop professionally</li> </ul>				
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.				
		<b>2 hrs + 2 hrs = 4 hrs</b>			
		Time(Hrs.)			
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Plan for <b>vegetable</b> processing activities	<u>Planning for vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of planning vegetable processing activities</li> <li>• Planning vegetable processing activities</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
2.	Budget <b>vegetable</b> processing activities	<u>Budgeting vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of budgeting vegetable processing activities</li> <li>• Budgeting vegetable processing activities</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
3.	Organize <b>vegetable</b> processing activities	<u>Organizing vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of organizing vegetable processing activities</li> <li>• Organizing vegetable processing activities</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
4.	Direct <b>vegetable</b> processing activities	<u>Directing vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of directing vegetable processing activities</li> <li>• Directing vegetable processing activities</li> </ul>	0.25	0.25	0.5

			<ul style="list-style-type: none"> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>			
5.	Control vegetable processing activities		<u>Controlling vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of controlling vegetable processing activities</li> <li>• Controlling vegetable processing activities</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
6.	Manage wastages		<u>Managing wastages:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, and principles</li> <li>• Procedures of managing wastages</li> <li>• Managing wastages</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
7.	Communicate with others		<u>Communicating with others:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, principles and uses</li> <li>• Procedures of communicating with others</li> <li>• Communicating with others</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
8.	Develop professionally		<u>Developing professionally:</u> <ul style="list-style-type: none"> <li>• Concept, need/importance, and uses</li> <li>• Procedures of developing professionally</li> <li>• Developing professionally</li> <li>• Precautions to be taken</li> <li>• Keeping records</li> </ul>	0.25	0.25	0.5
			Sub total:	2	2	4
<b>Sub module: 2: Vegetable processing unit</b>						
<b>Description:</b> It deals with the knowledge and skills related to the management of vegetable processing unit.						
<b>Objectives:</b>						
<ul style="list-style-type: none"> <li>▪ To meet legal requirements</li> <li>▪ To prepare investment plan</li> <li>▪ To select factory site</li> <li>▪ To prepare a plan of a vegetable preservation factory</li> <li>▪ To lay out a canning line</li> <li>▪ To lay out a juice plant</li> </ul>						

	<ul style="list-style-type: none"> <li>▪ To manage factory buildings</li> <li>▪ To manage water supply / drainage</li> <li>▪ To manage manpower</li> <li>▪ To manage machinery / equipment</li> <li>▪ To run <b>vegetable</b> processing activities</li> <li>▪ To maintain <b>vegetable</b> processing activities</li> </ul>				
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.				
		<b>2 hrs + 4 hrs = 6 hrs</b>			
		Time(Hrs.)			
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Meet legal requirements	<u>Meeting legal requirements:</u> <ul style="list-style-type: none"> <li>• Concept of legal requirements</li> <li>• Need to meet legal requirements</li> <li>• Meeting legal requirements</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.4	0.57
2.	Prepare investment plan	<u>Preparing investment plan:</u> <ul style="list-style-type: none"> <li>• Concept of investment plan</li> <li>• Need of investment plan</li> <li>• Principle and procedures for preparing investment plan</li> <li>• Application/uses of investment plan</li> <li>• Preparing investment plan</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.4	0.57
3.	Select factory site	<u>Selecting factory site:</u> <ul style="list-style-type: none"> <li>• Concept of factory site</li> <li>• Factory site selection criteria</li> <li>• Principle and procedures for selecting factory site</li> <li>• Selecting factory site</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.4	0.57
4.	Prepare a plan of a vegetable preservation factory	<u>Preparing a plan of a vegetable preservation factory:</u> <ul style="list-style-type: none"> <li>• Concept of plan of a vegetable preservation factory</li> <li>• Need of plan of a vegetable preservation factory</li> <li>• Principle and procedures for preparing a plan of a vegetable preservation factory</li> </ul>	0.17	0.4	0.57

		<ul style="list-style-type: none"> <li>• Preparing a plan of a vegetable preservation factory Application/uses of the plan</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>			
5.	Lay out a canning line	<u>Laying out a canning line:</u> <ul style="list-style-type: none"> <li>• Concept, need and uses of lay out of a canning line</li> <li>• Principle and procedures for laying out a canning line</li> <li>• Laying out a canning line</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.3	0.47
6.	Lay out a juice plant	<u>Laying out a juice plant:</u> <ul style="list-style-type: none"> <li>• Concept, need and uses of lay out of a juice plant</li> <li>• Principle and procedures for laying out a juice plant</li> <li>• Laying out a juice plant</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.3	0.47
7.	Manage factory buildings	<u>Managing factory buildings:</u> <ul style="list-style-type: none"> <li>• Concept of managing factory buildings</li> <li>• Principle and procedures for managing factory buildings</li> <li>• Managing factory buildings</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.3	0.47
8.	Manage water supply / drainage	<u>Managing water supply / drainage:</u> <ul style="list-style-type: none"> <li>• Concept of managing water supply / drainage</li> <li>• Principle and procedures for managing water supply / drainage</li> <li>• Managing water supply / drainage</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.17	0.3	0.47
9.	Manage manpower	<u>Managing manpower:</u> <ul style="list-style-type: none"> <li>• Concept of managing manpower</li> <li>• Principle and procedures for managing manpower</li> <li>• Managing manpower</li> </ul>	0.16	0.3	0.46

		<ul style="list-style-type: none"> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>			
10.	Manage machinery / equipment	<u>Managing machinery / equipment:</u> <ul style="list-style-type: none"> <li>• Concept of managing machinery / equipment</li> <li>• Principle and procedures for managing machinery / equipment</li> <li>• Managing machinery / equipment</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.16	0.3	0.46
11.	Run <b>vegetable</b> processing activities	<u>Running vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept of running vegetable processing activities</li> <li>• Principle and procedures for running vegetable processing activities</li> <li>• Running vegetable processing activities</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.16	0.3	0.46
12.	Maintain <b>vegetable</b> processing activities	<u>Maintaining vegetable processing activities:</u> <ul style="list-style-type: none"> <li>• Concept of maintaining vegetable processing activities</li> <li>• Principle and procedures for maintaining vegetable processing activities</li> <li>• Maintaining vegetable processing activities</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.16	0.3	0.46
		Sub total:	2	4	6
<b>Sub module: 3: Marketing</b>					
<b>Description:</b> It deals with the knowledge and skills related to the marketing of processed vegetable products.					
<b>Objectives:</b> <ul style="list-style-type: none"> <li>▪ To collect demand of <b>vegetable</b> products</li> <li>▪ To analyze demand of <b>vegetable</b> products</li> <li>▪ To design <b>vegetable</b> products</li> <li>▪ To price <b>vegetable</b> products</li> <li>▪ To place <b>vegetable</b> products</li> <li>▪ To promote <b>vegetable</b> products</li> <li>▪ To sale <b>vegetable</b> products</li> <li>▪ To record sales</li> <li>▪ To calculate profit / loss</li> </ul>					

	▪ To prepare reinvestment plan				
	<b>Tasks:</b> Each task consists of related technical knowledge and time allocation for both the theoretical and practical aspects of it.				
			<b>3 hrs + 2 hrs = 5 hrs</b>		
			Time(Hrs.)		
SN	Tasks	Related technical knowledge	Th.	Pr.	Tot.
1.	Collect demand of <b>vegetable</b> products	<u>Collecting demand of vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of collecting demand of vegetable products</li> <li>• Principle and procedures for collecting demand of vegetable products</li> <li>• Collecting demand of vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
2.	Analyze demand of <b>vegetable</b> products	<u>Analyzing demand of vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of analyzing demand of vegetable products</li> <li>• Principle and procedures for analyzing demand of vegetable products analyzing demand of vegetable products</li> <li>• Analyzing demand of vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
3.	Design <b>vegetable</b> products	<u>Designing vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of designing vegetable products</li> <li>• Principle and procedures for designing vegetable products</li> <li>• Designing vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
4.	Price <b>vegetable</b> products	<u>Pricing vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of pricing vegetable products</li> <li>• Principle and procedures for pricing vegetable products</li> <li>• Pricing vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5

5.	Place <b>vegetable</b> products	<u>Placing vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of placing vegetable products</li> <li>• Principle and procedures for placing vegetable products</li> <li>• Placing vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
6.	Promote <b>vegetable</b> products	<u>Promoting vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of promoting vegetable products</li> <li>• Principle and procedures for promoting vegetable products</li> <li>• Promoting vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
7.	Sell <b>vegetable</b> products	<u>Selling vegetable products:</u> <ul style="list-style-type: none"> <li>• Concept and need of selling vegetable products</li> <li>• Principle and procedures for selling vegetable products</li> <li>• Selling vegetable products</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
8.	Record sales	<u>Recording sales:</u> <ul style="list-style-type: none"> <li>• Concept and need of recording sales</li> <li>• Principle and procedures for recording sales</li> <li>• Recording sales</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
9.	Calculate profit / loss	<u>Calculating profit / loss:</u> <ul style="list-style-type: none"> <li>• Concept and need of calculating profit / loss</li> <li>• Principle and procedures for calculating profit / loss</li> <li>• Calculating profit / loss</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>	0.3	0.2	0.5
10.	Prepare reinvestment plan	<u>Preparing reinvestment plan:</u> <ul style="list-style-type: none"> <li>• Concept and need of preparing reinvestment plan</li> </ul>	0.3	0.2	0.5

		<ul style="list-style-type: none"> <li>• Principle and procedures for preparing reinvestment plan</li> <li>• Preparing reinvestment plan</li> <li>• Precautions to be followed</li> <li>• Keeping activity records</li> </ul>			
		Sub total:	3	2	5
		<b>All total:</b>	<b>102</b>	<b>288</b>	<b>390</b>

## **Reading materials**

- Instructor selected related text and reference books
- Instructor prepared notes, handouts, and manuals

## **Facilities**

- Administrative rooms
- Sufficient class rooms
- Vegetable processing workshop /unit
- Store
- Library
- Canteen (optional)
- Hostel (optional)
- Computers
- Telephone
- Water supply facility
- Electricity supply facility
- Vehicle (available to use)

## **Tools, Materials, equipment**

- Vegetables
- Vegetable preservatives
- Coloring materials
- Water filters
- Peeling knife
- Can opener / cork remover
- Core remover
- Cutting knife
- Pitting knife
- Corer / seed remover
- Can sealer
- Bottle sealer
- Pressure cooker with pressure gauge
- Hand pulpers
- Electric pulper / pulping machine
- Steam jacketed kettle
- Refractometer
- Thermometer / jelly thermometer
- Basket press
- Crown corking machine
- Fermentation bung
- Vinegar generator
- Funnel

- Plastic tubes and clamps
- Bottles
- Caps
- Water cans
- Capping machine
- Gloves
- Peeler / slicer machine
- Hand peeler
- Glass / liter measure / 5 liter jerkin
- Filtering cloth
- Sieve
- Rods
- Sulphuring cabinets
- Fillers
- Pasteurization container / equipment
- Bottle washing tools / equipment
- Sterilizers
- Capping machine
- Jar sealer
- Air lock
- Hydrometer
- Corking equipment
- Juice extractor / juicer machine
- Crusher
- Coolers
- Heat sealer
- Tin containers
- Glass containers
- Polyethylene [PE] packaging materials
- Polypropylene [PP] packaging materials
- Paper packaging materials

## Appendices

<b>List of duties and tasks</b>	
Job: Vegetable processor	
<b>O1. Be familiar with vegetables</b>	
<ol style="list-style-type: none"> <li>1. Be familiar with the concept of vegetables</li> <li>2. Classify vegetables</li> <li>3. Identify vegetables</li> <li>4. State nutritive value of vegetables</li> <li>5. Enlist vegetable(s) sources of / rich in vitamins</li> <li>6. Enlist vegetable(s) sources of / rich in minerals</li> </ol>	<ol style="list-style-type: none"> <li>7. Enlist vegetable(s) sources of / rich in proteins</li> <li>8. Enlist vegetable(s) sources of / rich in carbohydrates</li> <li>9. State economic value of vegetables</li> <li>10. State aesthetic value of vegetables</li> </ol>
<b>O2. Apply principles of preservation</b>	
<ol style="list-style-type: none"> <li>1. Apply principle of delaying the growth of micro-organisms</li> <li>2. Apply principle of asepsis / keeping out the micro-organisms</li> <li>3. Apply principle of removal of micro-organisms</li> <li>4. Apply principle of high temperature preservation</li> <li>5. Apply principle of sterilization</li> <li>6. Apply principle of pasteurization</li> <li>7. Apply principle of blanching</li> <li>8. Apply principle of low temperature preservation</li> <li>9. Apply principle of cold storage</li> <li>10. Apply principle of freezing storage</li> <li>11. Apply principle of sugared preservation</li> </ol>	<ol style="list-style-type: none"> <li>12. Apply principle of salted preservation</li> <li>13. Apply principle of chemical preservation</li> <li>14. Apply principle of sulphur dioxide preservation</li> <li>15. Apply principle of sodium benzoate preservation</li> <li>16. Apply principle of preservation by fermentation</li> <li>17. Apply principle of fermentation of fruit juice</li> <li>18. Apply principle of fermentation to vinegar</li> <li>19. Apply principle of distillation</li> <li>20. Apply principle of preservation by drying</li> <li>21. Apply mechanism of preservation by drying</li> <li>22. Apply principle of sun drying</li> <li>23. Apply principle of artificial drying</li> </ol>
<b>O3. Manage/handle/maintain materials / tools / equipment / machines</b>	
<ol style="list-style-type: none"> <li>1. Manage/handle vegetables</li> <li>2. Manage/handle vegetable preservatives</li> <li>3. Manage/handle coloring materials</li> <li>4. Manage/handle/ maintain water filters</li> <li>5. Manage/handle/ maintain peeling knife</li> <li>6. Manage/handle/ maintain can opener / cork remover</li> <li>7. Manage/handle/ maintain core remover</li> <li>8. Manage/handle/ maintain cutting knife</li> <li>9. Manage/handle/ maintain pitting knife</li> <li>10. Manage/handle/ maintain corer / seed remover</li> <li>11. Manage/handle/ maintain can sealer</li> <li>12. Manage/handle/ maintain bottle sealer</li> <li>13. Manage/handle/ maintain pressure cooker with pressure gauge</li> <li>14. Manage/handle/ maintain hand pulpers</li> <li>15. Manage/handle/ maintain electric pulper / pulping machine</li> <li>16. Manage/handle/ maintain steam jacketed kettle</li> <li>17. Manage/handle/ maintain refractometer</li> <li>18. Manage/handle/ maintain thermometer / jelly thermometer</li> <li>19. Manage/handle/ maintain basket press</li> <li>20. Manage/handle/ maintain crown corking machine</li> <li>21. Manage/handle/ maintain fermentation bung</li> <li>22. Manage/handle/ maintain vinegar generator</li> </ol>	<ol style="list-style-type: none"> <li>26. Manage/handle caps</li> <li>27. Manage/handle/ maintain water cans</li> <li>28. Manage/handle/ maintain capping machine</li> <li>29. Manage/handle gloves</li> <li>30. Manage/handle/ maintain peeler / slicer machine</li> <li>31. Manage/handle/ maintain Hand peeler</li> <li>32. Manage/handle/ Glass / liter measure / 5 liter jerkin</li> <li>33. Manage/handle Filtering cloth</li> <li>34. Manage/handle sieve</li> <li>35. Manage/handle Rods</li> <li>36. Manage/handle/ maintain sulphuring cabinets</li> <li>37. Manage/handle/ maintain fillers</li> <li>38. Manage/handle/ maintain pasteurization container / equipment</li> <li>39. Manage/handle/ maintain bottle washing tools / equipment</li> <li>40. Manage/handle/ maintain sterilizers</li> <li>41. Manage/handle/ maintain capping machine</li> <li>42. Manage/handle/ maintain jar sealer</li> <li>43. Manage/handle/ maintain air lock</li> <li>44. Manage/handle/ maintain hydrometer</li> <li>45. Manage/handle/ maintain corking equipment</li> <li>46. Manage/handle/ maintain juice extractor / juicer machine</li> <li>47. Manage/handle/ maintain crusher</li> </ol>

23. Manage/handle funnel 24. Manage/handle/ maintain plastic tubes and clamps 25. Manage/handle bottles	48. Manage/handle/ maintain coolers 49. Manage/handle/ maintain heat sealer
<b>I. Process vegetables</b>	
1. Process Peeled Tomatoes 2. Process Tomatoes Pulp 3. Process Dried Carrots 4. Process Dried/Dehydration Potatoes 5. Process Dried/Dehydration Leeks 6. Process Dried Onions	7. Process Dried Tomatoes 8. Process Tomato Juice Processing 9. Process Tomato Ketchup or Sauce 10. Process Dried Green Beans 11. Process Dried Okra 12. Process Dried Cabbages
<b>II. Perform general methods for bottling / canning of vegetables</b>	
1. Perform selection of vegetables 2. Perform sorting and grading 3. Perform washing 4. Perform blanching 5. Perform filling and brining	6. Perform exhausting 7. Perform sealing 8. Perform heat processing 9. Perform cooling 10. Perform labeling and storing
<b>III. Perform bottling / canning of vegetables</b>	
1. Can/bottle peas 2. Can/bottle asparagus 3. Can/bottle beans 4. Can/bottle cabbage 5. Can/bottle cauliflower	6. Can/bottle carrot 7. Can/bottle mushroom 8. Can/bottle bamboo shoot 9. Can/bottle tomato
<b>IV. Prepare /make chutneys/sauces/pickles</b>	
1. Make/prepare tomato chutney 2. Make/prepare tomato sauce 3. Make/prepare dried salted pickle of sauerkraut 4. Make/prepare dried salted pickle of gundruk 5. Make/prepare brined pickle of cucumber	6. Make/prepare brined pickle of onion 7. Make/prepare brined pickle of cauliflower 8. Make/prepare oiled pickle of cucumber 9. Make/prepare oiled pickle of radish
<b>V. Make tomato products</b>	
10. Make Tomato juice 11. Make Tomato ketchup	12. Make Tomato sauce
<b>VI. Prepare chutneys /sauces / pickles</b>	
1. Perform method of preparation of chutneys 2. Prepare apple chutney 3. Prepare mango chutney 4. Prepare plum chutney	5. Prepare apple chutney 6. Prepare apple sauce 7. Prepare mango pickle 8. Prepare lemon / lime pickle
<b>VII. Perform drying of vegetables</b>	
1. Perform washing (preparation work) 2. Perform peeling (preparation work) 3. Perform slicing (preparation work) 4. Perform blanching	5. Perform sulphiting 6. Perform drying 7. Prepare schedule of drying of different vegetables
<b>VIII. Perform vegetable storage</b>	
1. Make cellar storage 2. Perform cellar storage of vegetable 3. Make cool chamber	4. Perform cool chamber storage of vegetable 5. Perform cold storage of vegetable 6. Perform freezing storage of vegetable
<b>IX. Manage vegetable processing activities</b>	
1. Plan for vegetable processing activities 2. Budget vegetable processing activities	5. Control vegetable processing activities 6. Manage wastages

3. Organize vegetable processing activities	7. Communicate with others
4. Direct vegetable processing activities	8. Develop professionally
<b>X. Establish vegetable processing unit / plant</b>	
1. Meet legal requirements	7. Manage factory buildings
2. Prepare investment plan	8. Manage water supply / drainage
3. Select factory site	9. Manage manpower
4. Prepare a plan of a vegetable preservation factory	10. Manage machinery / equipment
5. Lay out a canning line	11. Run vegetable processing activities
6. Lay out a juice plant	12. Maintain vegetable processing activities
<b>XI. Perform marketing of processed vegetable products</b>	
1. Collect demand of vegetable products	6. Promote vegetable products
2. Analyze demand of vegetable products	7. Sale vegetable products
3. Design vegetable products	8. Record sales
4. Price vegetable products	9. Calculate profit / loss
5. Place vegetable products	10. Prepare reinvestment plan

## **Modules, sub modules, objectives, and tasks**

### **Module: 1: Vegetables; preservation; packing containers; and processing tools, materials, equipment, & machines**

#### Objectives:

- To be familiar with vegetables
- To apply principles of preservation
- To identify/handle containers for packing

#### **Sub module: 1: Familiarization with vegetables**

##### Objective:

- To be familiar with the vegetables

##### Tasks:

1. Be familiar with the concept of vegetables
2. Classify vegetables
3. Identify vegetables
4. State nutritive value of vegetables
5. Enlist vegetable(s) sources of / rich in vitamins
6. Enlist vegetable(s) sources of / rich in minerals
7. Enlist vegetable(s) sources of / rich in proteins
8. Enlist vegetable(s) sources of / rich in carbohydrates
9. State economic value of vegetables
10. State aesthetic value of vegetables

#### **Sub module: 2: Applying principles of preservation**

##### Objective:

- To apply principles of preservation

##### Tasks:

1. Apply principle of delaying the growth of micro-organisms
2. Apply principle of asepsis / keeping out the micro-organisms
3. Apply principle of removal of micro-organisms
4. Apply principle of high temperature preservation
5. Apply principle of sterilization
6. Apply principle of pasteurization
7. Apply principle of blanching
8. Apply principle of low temperature preservation
9. Apply principle of cold storage
10. Apply principle of freezing storage
11. Apply principle of sugared preservation
12. Apply principle of salted preservation
13. Apply principle of chemical preservation
14. Apply principle of sulphur dioxide preservation
15. Apply principle of sodium benzoate preservation
16. Apply principle of preservation by fermentation
17. Apply principle of fermentation of fruit juice
18. Apply principle of fermentation to vinegar
19. Apply principle of distillation

20. Apply principle of preservation by drying
21. Apply mechanism of preservation by drying
22. Apply principle of sun drying
23. Apply principle of artificial drying

### **Sub module: 3: Containers for packing**

#### Objective:

- To manage/handle/maintain containers/materials for packing

#### Tasks:

1. Manage/handle/maintain tin containers
2. Perform lacouering
3. Manage/handle/maintain glass containers
4. Manage/handle polyethylene [PE] packaging materials
5. Manage/handle polypropylene [PP] packaging materials
6. Manage/handle paper packaging materials

### **Sub module: 4: Processing tools, materials, equipment & machines**

#### Objectives:

- To identify vegetable processing tools, materials, equipment & machines
- To handle vegetable processing tools, materials, equipment & machines
- To care for vegetable processing tools, materials, equipment & machines
- To maintain vegetable processing tools, materials, equipment & machines

#### Tasks:

1. Manage/handle vegetables
2. Manage/handle vegetable preservatives
3. Manage/handle coloring materials
4. Manage/handle/ maintain water filters
5. Manage/handle/ maintain peeling knife
6. Manage/handle/ maintain can opener / cork remover
7. Manage/handle/ maintain core remover
8. Manage/handle/ maintain cutting knife
9. Manage/handle/ maintain pitting knife
10. Manage/handle/ maintain corer / seed remover
11. Manage/handle/ maintain can sealer
12. Manage/handle/ maintain bottle sealer
13. Manage/handle/ maintain pressure cooker with pressure gauge
14. Manage/handle/ maintain hand pulpers
15. Manage/handle/ maintain electric pulper / pulping machine
16. Manage/handle/ maintain steam jacketed kettle
17. Manage/handle/ maintain refractometer
18. Manage/handle/ maintain thermometer / jelly thermometer
19. Manage/handle/ maintain basket press
20. Manage/handle/ maintain crown corking machine
21. Manage/handle/ maintain fermentation bung
22. Manage/handle/ maintain vinegar generator
23. Manage/handle funnel
24. Manage/handle/ maintain plastic tubes and clamps
25. Manage/handle bottles

26. Manage/handle caps
27. Manage/handle/ maintain water cans
28. Manage/handle/ maintain capping machine
29. Manage/handle gloves
30. Manage/handle/ maintain peeler / slicer machine
31. Manage/handle/ maintain Hand peeler
32. Manage/handle/ Glass / liter measure / 5 liter jerkin
33. Manage/handle Filtering cloth
34. Manage/handle sieve
35. Manage/handle Rods
36. Manage/handle/ maintain sulphuring cabinets
37. Manage/handle/ maintain fillers
38. Manage/handle/ maintain pasteurization container / equipment
39. Manage/handle/ maintain bottle washing tools / equipment
40. Manage/handle/ maintain sterilizers
41. Manage/handle/ maintain capping machine
42. Manage/handle/ maintain jar sealer
43. Manage/handle/ maintain air lock
44. Manage/handle/ maintain hydrometer
45. Manage/handle/ maintain corking equipment
46. Manage/handle/ maintain juice extractor / juicer machine
47. Manage/handle/ maintain crusher
48. Manage/handle/ maintain coolers
49. Manage/handle/ maintain heat sealer

## **Module: 2: Processing of specific vegetables**

### Objectives:

- To process peeled tomatoes
- To process tomatoes pulp
- To process dried carrots
- To process dried/dehydrated potatoes
- To process dried/dehydrated leeks
- To process dried onion
- To process dried tomatoes
- To process tomato juice
- To process tomato ketchup/sauce
- To process dried green beans
- To process dried okra
- To process dried cabbage

### **Sub module: 1: Processing of peeled tomatoes**

#### Objective:

- To process peeled tomatoes

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Carry out sorting
4. Carry out scalding

5. Carry out cooling
6. Carry out peeling
7. Carry out filling
8. Carry out closing
9. Carry out pasteurization
10. Carry out cooling
11. Carry out labeling
12. Carry out storage

### **Sub module: 2: Processing of tomatoes pulp**

#### Objective:

- To process tomatoes pulp

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Carry out sorting
4. Carry out draining
5. Carry out cutting
6. Carry out extraction
7. Carry out concentration
8. Carry out filling
9. Carry out capping
10. Carry out pasteurization
11. Carry out cooling
12. Carry out labeling
13. Carry out storage

### **Sub module: 3: Processing of dried carrots**

#### Objective:

- To process dried carrots

#### Tasks:

1. Carry out reception
2. Carry out cleaning
3. Carry out washing
4. Carry out scraping
5. Carry out control
6. Carry out cutting
7. Carry out blanching
8. Carry out cooling
9. Carry out sulphiting
10. Carry out drying
11. Carry out sorting
12. Carry out control
13. Carry out packaging
14. Carry out storage

### **Sub module: 4: Processing of dried/dehydrated potatoes**

Objective:

- To process dried/dehydrated potatoes

Tasks:

1. Carry out reception
2. Carry out temporary storage
3. Carry out washing
4. Carry out rectification
5. Carry out peeling
6. Carry out control and rectification
7. Carry out cutting
8. Carry out blanching and treatment
9. Carry out drying and dehydration
10. Carry out sorting
11. Carry out sieving
12. Carry out control
13. Carry out packaging
14. Carry out storage
15. Carry out shipping

**Sub module: 5: Processing of dried/dehydrated leeks**

Objective:

- To process dried/dehydrated leeks

Tasks:

1. Carry out reception
2. Carry out temporary storage
3. Carry out sorting
4. Carry out washing
5. Carry out separation
6. Carry out cutting
7. Carry out blanching
8. Carry out drying and dehydration
9. Carry out sorting/ sieving
10. Carry out control
11. Carry out packaging
12. Carry out storage
13. Carry out shipping

**Sub module: 6: Processing of dried onion**

Objective:

- To process dried onion

Tasks:

1. Carry out reception
2. Carry out cleaning
3. Carry out size grading
4. Carry out removal of tops, roots and outer leaves
5. Carry out pre-washing
6. Carry out cutting
7. Carry out washing

8. Carry out draining
9. Carry out drying
10. Carry out sorting/ sieving
11. Carry out control
12. Carry out packing
13. Carry out storage

### **Sub module: 7: Processing of dried tomatoes**

#### Objective:

- To process dried tomatoes

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Carry out trimming
4. Carry out sorting
5. Carry out draining
6. Carry out slicing
7. Carry out drying
8. Carry out packing
9. Carry out labeling
10. Carry out storage

### **Sub module: 8: Processing of tomato juice**

#### Objective:

- To process tomato juice

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Carry out control
4. Carry out cutting
5. Carry out preheating
6. Carry out juice extraction
7. Carry out refining
8. Carry out concentration
9. Carry out filling
10. Carry out closing
11. Carry out pasteurization
12. Carry out cooling
13. Carry out labeling
14. Carry out storage

### **Sub module: 9: Processing of tomato ketchup/sauce**

#### Objective:

- To process tomato ketchup/sauce

#### Tasks:

1. Carry out reception
2. Carry out sorting

3. Obtain wholesome red tomatoes
4. Carry out soaking and washing
5. Carry out coring and slicing
6. Carry out heating and crushing
7. Carry out pulping
8. Obtain tomato pulp
9. Add spices, sugar, salt, onion, garlic, vinegar, and thickener
10. Carry out cooking and concentration
11. Pass the mass through finisher
12. Add preservatives
13. Carry out filling (in bottles)
14. Carry out low pasteurization
15. Carry out cleaning of the bottles
16. Carry out labeling
17. Carry out packing
18. Carry out marketing

### **Sub module: 10: Processing of dried green beans**

#### Objective:

- To process dried green beans

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Obtain cutting
4. Carry out blanching
5. Carry out cooling
6. Carry out sulphiting
7. Carry out drying
8. Carry out packing
9. Carry out storage

### **Sub module: 11: Processing of dried okra**

#### Objective:

- To process dried okra

#### Tasks:

1. Carry out reception
2. Carry out washing
3. Carry out trimming
4. Obtain cutting
5. Carry out blanching
6. Carry out cooling
7. Carry out sulphiting
8. Carry out drying
9. Carry out packing
10. Carry out storage

### **Sub module: 12: Processing of dried cabbage**

Objective:

- To process dried cabbage

Tasks:

1. Carry out reception
2. Carry out temporary storage
3. Carry out cleaning
4. Obtain sorting
5. Carry out removal of outer leaves and cores
6. Carry out pre-washing
7. Carry out cutting in quarters
8. Carry out shredding
9. Carry out washing
10. Carry out blanching
11. Carry out cooling
12. Carry out sulphiting
13. Carry out drying
14. Carry out sorting
15. Carry out control
16. Carry out packing
17. Carry out storage

**Module: 3: Bottling and canning of vegetables**

Objectives:

- To carry out general methods of bottling and canning of vegetables
- To carry out canning and bottling of different vegetables

**Sub module: 1: General methods of bottling and canning of vegetables**

Objective:

- To perform general methods of bottling and canning of vegetables

Tasks:

1. Perform selection of vegetables
2. Perform sorting and grading
3. Perform washing
4. Perform blanching
5. Perform filling and brining
6. Perform exhausting
7. Perform sealing
8. Perform heat processing
9. Perform cooling
10. Perform labeling and storing

**Sub module: 2: Canning and bottling of different vegetables**

Objective:

- To perform general methods of bottling and canning of different vegetables

Tasks:

1. Can/bottle peas
2. Can/bottle asparagus

3. Can/bottle beans
4. Can/bottle cabbage
5. Can/bottle cauliflower
6. Can/bottle carrot
7. Can/bottle mushroom
8. Can/bottle bamboo shoot
9. Can/bottle tomato

#### **Module: 4: Chutneys, sauces and pickles**

##### Objective:

- To make/prepare chutneys, sauces and pickles of different vegetables

##### Tasks:

1. Make/prepare tomato chutney
2. Make/prepare tomato sauce
3. Make/prepare dried salted pickle of sauerkraut
4. Make/prepare dried salted pickle of gundruk
5. Make/prepare brined pickle of cucumber
6. Make/prepare brined pickle of onion
7. Make/prepare brined pickle of cauliflower
8. Make/prepare oiled pickle of cucumber
9. Make/prepare oiled pickle of radish

#### **Module: 5: Tomato products**

##### Objective:

- To make tomato products (juice/ ketchup/ sauce)

##### **Sub module: 1: Tomato juice**

##### Objective:

- To make tomato juice

##### Tasks:

1. Perform selection of tomato fruit
2. Perform washing
3. Perform trimming
4. Perform crushing
5. Perform pulping
6. Perform extraction of juice
7. Perform addition of salt and sugar
8. Perform bottling or canning

##### **Sub module: 2: Tomato ketchup**

##### Objective:

- To make tomato ketchup

##### Tasks:

1. Perform selection of tomato fruit
2. Perform washing
3. Perform trimming

4. Perform crushing
5. Perform pulping
6. Extract juice
7. Perform juice standardization
8. Prepare recipe for ketchup (ingredients with their quantity)
9. Perform addition of ingredients
10. Perform cooking and concentration
11. Perform bottling

### **Sub module: 3: Tomato sauce**

#### Objective:

- To make tomato sauce

#### Tasks:

1. Perform selection of tomato fruit
2. Perform washing
3. Perform trimming
4. Perform crushing
5. Perform pulping
6. Extract juice
7. Perform juice standardization
8. prepare recipe for sauce (ingredients with their quantity)
9. Perform addition of ingredients
10. Perform cooking and concentration
11. Perform bottling

### **Module: 6: Drying and dehydration of vegetables**

#### Objective:

- To dry and dehydrate vegetables

#### Tasks:

1. Perform washing (preparation work)
2. Perform peeling (preparation work)
3. Perform slicing (preparation work)
4. Perform blanching
5. Perform sulphiting
6. Perform drying
7. Prepare schedule of drying of different vegetables

### **Module: 7: Storage of vegetables**

#### Objective:

- To store vegetables/ its products

#### Tasks:

1. Make cellar storage
2. Perform cellar storage of **vegetable**
3. Make cool chamber
4. Perform cool chamber storage of **vegetable**
5. Perform cold storage of **vegetable**
6. Perform freezing storage of **vegetable**

## **Module: 8: Managing processing activities/unit and marketing**

### Objectives:

- To manage vegetable processing activities
- To manage vegetable processing unit
- To market processed vegetable products

### **Sub module: 1: Vegetable processing activities**

#### Objective:

- To manage vegetable processing activities

#### Tasks:

1. Plan for **vegetable** processing activities
2. Budget **vegetable** processing activities
3. Organize **vegetable** processing activities
4. Direct **vegetable** processing activities
5. Control **vegetable** processing activities
6. Manage wastages
7. Communicate with others
8. Develop professionally

### **Sub module: 2: Vegetable processing unit**

#### Objective:

- To manage vegetable processing unit

#### Tasks:

1. Meet legal requirements
2. Prepare investment plan
3. Select factory site
4. Prepare a plan of a vegetable preservation factory
5. Lay out a canning line
6. Lay out a juice plant
7. Manage factory buildings
8. Manage water supply / drainage
9. Manage manpower
10. Manage machinery / equipment
11. Run **vegetable** processing activities
12. Maintain **vegetable** processing activities

### **Sub module: 3: Marketing**

#### Objective:

- To market processed vegetable products

#### Tasks:

1. Collect demand of **vegetable** products
2. Analyze demand of **vegetable** products
3. Design **vegetable** products
4. Price **vegetable** products
5. Place **vegetable** products

6. Promote vegetable products
7. Sale vegetable products
8. Record sales
9. Calculate profit / loss
10. Prepare reinvestment plan

### Time allocation

Module /Sub module	SN	Tasks	Time(Hrs.)			
			Th.	Pr.	Tot.	
1 Vegetables; preservation; packing containers; and processing tools, materials, equipment, & machines						
1. Familiarization with vegetables	1.	Be familiar with the concept of vegetables	0.2	0.3	0.5	
	2.	Classify vegetables	0.2	0.3	0.5	
	3.	Identify vegetables	0.2	0.3	0.5	
	4.	State nutritive value of vegetables	0.2	0.3	0.5	
	5.	Enlist vegetable(s) sources of / rich in vitamins	0.2	0.3	0.5	
	6.	Enlist vegetable(s) sources of / rich in minerals	0.2	0.3	0.5	
	7.	Enlist vegetable(s) sources of / rich in proteins	0.2	0.3	0.5	
	8.	Enlist vegetable(s) sources of / rich in carbohydrates	0.2	0.3	0.5	
	9.	State economic value of vegetables	0.2	0.3	0.5	
	10.	State aesthetic value of vegetables	0.2	0.3	0.5	
Sub total:		10	Sub total:	2	3	5
2. Applying principles of preservation	1.	Apply principle of delaying the growth of micro-organisms	0.2	0.08	0.28	
	2.	Apply principle of asepsis / keeping out the micro-organisms	0.2	0.08	0.28	
	3.	Apply principle of removal of micro-organisms	0.2	0.08	0.28	
	4.	Apply principle of high temperature preservation	0.2	0.08	0.28	
	5.	Apply principle of sterilization	0.2	0.08	0.28	
	6.	Apply principle of pasteurization	0.2	0.08	0.28	
	7.	Apply principle of blanching	0.2	0.08	0.28	
	8.	Apply principle of low temperature preservation	0.1	0.09	0.19	
	9.	Apply principle of cold storage	0.1	0.09	0.19	
	10.	Apply principle of freezing storage	0.1	0.09	0.19	
	11.	Apply principle of sugared preservation	0.1	0.09	0.19	
	12.	Apply principle of salted preservation	0.1	0.09	0.19	
	13.	Apply principle of chemical preservation	0.1	0.09	0.19	
	14.	Apply principle of sulphur dioxide preservation	0.1	0.09	0.19	
	15.	Apply principle of sodium benzoate preservation	0.1	0.09	0.19	
	16.	Apply principle of preservation by fermentation	0.1	0.09	0.19	
	17.	Apply principle of fermentation of fruit juice	0.1	0.09	0.19	
	18.	Apply principle of fermentation to vinegar	0.1	0.09	0.19	
	19.	Apply principle of distillation	0.1	0.09	0.19	
	20.	Apply principle of preservation by drying	0.1	0.09	0.19	
	21.	Apply mechanism of preservation by drying	0.1	0.09	0.19	
	22.	Apply principle of sun drying	0.1	0.09	0.19	
	23.	Apply principle of artificial drying	0.1	0.09	0.19	
Sub total:		23	Sub total:	3	2	5
3. Containers for packing	1.	Manage/handle/maintain tin containers	0.4	0.6	1.0	
	2.	Perform lacouering	0.4	0.6	1.0	

	3.	Manage/handle/maintain glass containers		0.3	0.7	1.0
	4.	Manage/handle polyethylene [PE] packaging materials		0.3	0.7	1.0
	5.	Manage/handle polypropylene [PP] packaging materials		0.3	0.7	1.0
	6.	Manage/handle paper packaging materials		0.3	0.7	1.0
	Sub total:	6	Sub total:	2	4	6
4. Processing tools, materials, equipment & machines	1.	Manage/handle vegetables		0.05	0.06	0.11
	2.	Manage/handle vegetable preservatives		0.05	0.06	0.11
	3.	Manage/handle coloring materials		0.05	0.06	0.11
	4.	Manage/handle/ maintain water filters		0.05	0.17	0.22
	5.	Manage/handle/ maintain peeling knife		0.04	0.17	0.21
	6.	Manage/handle/ maintain can opener / cork remover		0.04	0.17	0.21
	7.	Manage/handle/ maintain core remover		0.04	0.17	0.21
	8.	Manage/handle/ maintain cutting knife		0.04	0.17	0.21
	9.	Manage/handle/ maintain pitting knife		0.04	0.17	0.21
	10.	Manage/handle/ maintain corer / seed remover		0.04	0.17	0.21
	11.	Manage/handle/ maintain can sealer		0.04	0.17	0.21
	12.	Manage/handle/ maintain bottle sealer		0.04	0.17	0.21
	13.	Manage/handle/ maintain pressure cooker with pressure gauge		0.04	0.17	0.21
	14.	Manage/handle/ maintain hand pulpers		0.04	0.17	0.21
	15.	Manage/handle/ maintain electric pulper / pulping machine		0.04	0.17	0.21
	16.	Manage/handle/ maintain steam jacketed kettle		0.04	0.17	0.21
	17.	Manage/handle/ maintain refractometer		0.04	0.17	0.21
	18.	Manage/handle/ maintain thermometer / jelly thermometer		0.04	0.17	0.21
	19.	Manage/handle/ maintain basket press		0.04	0.17	0.21
	20.	Manage/handle/ maintain crown corking machine		0.04	0.17	0.21
	21.	Manage/handle/ maintain fermentation bung		0.04	0.17	0.21
	22.	Manage/handle/ maintain vinegar generator		0.04	0.17	0.21
	23.	Manage/handle funnel		0.04	0.17	0.21
	24.	Manage/handle/ maintain plastic tubes and clamps		0.04	0.17	0.21
	25.	Manage/handle bottles		0.04	0.17	0.21
	26.	Manage/handle caps		0.04	0.17	0.21
	27.	Manage/handle/ maintain water cans		0.04	0.17	0.21
	28.	Manage/handle/ maintain capping machine		0.04	0.17	0.21
	29.	Manage/handle gloves		0.04	0.17	0.21
	30.	Manage/handle/ maintain peeler / slicer machine		0.04	0.17	0.21
	31.	Manage/handle/ maintain Hand peeler		0.04	0.17	0.21
	32.	Manage/handle/ Glass / liter measure / 5 liter jerkin		0.04	0.17	0.21
	33.	Manage/handle Filtering cloth		0.04	0.17	0.21
	34.	Manage/handle sieve		0.04	0.17	0.21
	35.	Manage/handle Rods		0.04	0.17	0.21

		36.	Manage/handle/ maintain sulphuring cabinets			0.04	0.17	0.21
		37.	Manage/handle/ maintain fillers			0.04	0.17	0.21
		38.	Manage/handle/ maintain pasteurization container / equipment			0.04	0.17	0.21
		39.	Manage/handle/ maintain bottle washing tools / equipment			0.04	0.17	0.21
		40.	Manage/handle/ maintain sterilizers			0.04	0.17	0.21
		41.	Manage/handle/ maintain capping machine			0.04	0.17	0.21
		42.	Manage/handle/ maintain jar sealer			0.04	0.17	0.21
		43.	Manage/handle/ maintain air lock			0.04	0.17	0.21
		44.	Manage/handle/ maintain hydrometer			0.04	0.17	0.21
		45.	Manage/handle/ maintain corking equipment			0.04	0.17	0.21
		46.	Manage/handle/ maintain juice extractor / juicer machine			0.04	0.17	0.21
		47.	Manage/handle/ maintain crusher			0.04	0.17	0.21
		48.	Manage/handle/ maintain coolers			0.04	0.17	0.21
		49.	Manage/handle/ maintain heat sealer			0.04	0.17	0.21
	Sub total:		49		Sub total:	2	8	10
	2. Processing of specific vegetables							
	1. Processing of peeled tomatoes							
		1.	Carry out reception			0.17	0.4	0.57
		2.	Carry out washing			0.17	0.4	0.57
		3.	Carry out sorting			0.17	0.4	0.57
		4.	Carry out scalding			0.17	0.4	0.57
		5.	Carry out cooling			0.17	0.4	0.57
		6.	Carry out peeling			0.17	0.4	0.57
		7.	Carry out filling			0.17	0.4	0.57
		8.	Carry out closing			0.17	0.4	0.57
		9.	Carry out pasteurization			0.16	0.5	0.66
		10.	Carry out cooling			0.16	0.5	0.66
		11.	Carry out labeling			0.16	0.4	0.56
		12.	Carry out storage			0.16	0.4	0.56
	Sub total:		12		Sub total:	2	5	7
	2. Processing of tomatoes pulp							
		1.	Carry out reception			0.16	0.47	0.63
		2.	Carry out washing			0.16	0.47	0.63
		3.	Carry out sorting			0.16	0.46	0.62
		4.	Carry out draining			0.16	0.46	0.62
		5.	Carry out cutting			0.16	0.46	0.62
		6.	Carry out extraction			0.15	0.46	0.61
		7.	Carry out concentration			0.15	0.46	0.61
		8.	Carry out filling			0.15	0.46	0.61
		9.	Carry out capping			0.15	0.46	0.61
		10.	Carry out pasteurization			0.15	0.46	0.61
		11.	Carry out cooling			0.15	0.46	0.61
		12.	Carry out labeling			0.15	0.46	0.61
		13.	Carry out storage			0.15	0.46	0.61
	Sub total:		13		Sub total:	2	6	8
	3. Processing of dried carrots							
		1.	Carry out reception			0.15	0.53	0.68

	2.	Carry out cleaning			0.15	0.43	0.58
	3.	Carry out washing			0.15	0.42	0.57
	4.	Carry out scraping			0.15	0.42	0.57
	5.	Carry out control			0.14	0.42	0.56
	6.	Carry out cutting			0.14	0.42	0.56
	7.	Carry out blanching			0.14	0.42	0.56
	8.	Carry out cooling			0.14	0.42	0.56
	9.	Carry out sulphiting			0.14	0.42	0.56
	10.	Carry out drying			0.14	0.42	0.56
	11.	Carry out sorting			0.14	0.42	0.56
	12.	Carry out control			0.14	0.42	0.56
	13.	Carry out packaging			0.14	0.42	0.56
	14.	Carry out storag			0.14	0.42	0.56
	Sub total:	14		Sub total:	2	6	8
4. Processing of dried/dehydrated potatoes	1.	Carry out reception			0.14	0.4	0.54
	2.	Carry out temporary storage			0.14	0.4	0.54
	3.	Carry out washing			0.14	0.4	0.54
	4.	Carry out rectification			0.14	0.4	0.54
	5.	Carry out peeling			0.14	0.4	0.54
	6.	Carry out control and rectification			0.13	0.4	0.53
	7.	Carry out cutting			0.13	0.4	0.53
	8.	Carry out blanching and treatment			0.13	0.4	0.53
	9.	Carry out drying and dehydration			0.13	0.4	0.53
	10.	Carry out sorting			0.13	0.4	0.53
	11.	Carry out sieving			0.13	0.4	0.53
	12.	Carry out control			0.13	0.4	0.53
	13.	Carry out packaging			0.13	0.4	0.53
	14.	Carry out storage			0.13	0.4	0.53
	15.	Carry out shipping			0.13	0.4	0.53
	Sub total:	15		Sub total:	2	6	8
5. Processing of dried/dehydrated leeks	1.	Carry out reception			0.16	0.47	0.63
	2.	Carry out temporary storage			0.16	0.47	0.63
	3.	Carry out sorting			0.16	0.46	0.62
	4.	Carry out washing			0.16	0.46	0.62
	5.	Carry out separation			0.16	0.46	0.62
	6.	Carry out cutting			0.15	0.46	0.61
	7.	Carry out blanching			0.15	0.46	0.61
	8.	Carry out drying and dehydration			0.15	0.46	0.61
	9.	Carry out sorting/ sieving			0.15	0.46	0.61
	10.	Carry out control			0.15	0.46	0.61
	11.	Carry out packaging			0.15	0.46	0.61
	12.	Carry out storage			0.15	0.46	0.61
	13.	Carry out shipping			0.15	0.46	0.61
	Sub total:	13		Sub total:	2	6	8
6. Processing of dried onion	1.	Carry out reception			0.16	0.47	0.63

	2.	Carry out cleaning			0.16	0.47	0.63
	3.	Carry out size grading			0.16	0.46	0.62
	4.	Carry out removal of tops, roots and outer leaves			0.16	0.46	0.62
	5.	Carry out pre-washing			0.16	0.46	0.62
	6.	Carry out cutting			0.15	0.46	0.61
	7.	Carry out washing			0.15	0.46	0.61
	8.	Carry out draining			0.15	0.46	0.61
	9.	Carry out drying			0.15	0.46	0.61
	10.	Carry out sorting/ sieving			0.15	0.46	0.61
	11.	Carry out control			0.15	0.46	0.61
	12.	Carry out packing			0.15	0.46	0.61
	13.	Carry out storage			0.15	0.46	0.61
	Sub total:	13		Sub total:	2	6	8
7. Processing of dried tomatoes	1.	Carry out reception			0.2	0.6	0.8
	2.	Carry out washing			0.2	0.6	0.8
	3.	Carry out trimming			0.2	0.6	0.8
	4.	Carry out sorting			0.2	0.6	0.8
	5.	Carry out draining			0.2	0.6	0.8
	6.	Carry out slicing			0.2	0.6	0.8
	7.	Carry out drying			0.2	0.6	0.8
	8.	Carry out packing			0.2	0.6	0.8
	9.	Carry out labeling			0.2	0.6	0.8
	10.	Carry out storage			0.2	0.6	0.8
	Sub total:	10		Sub total:	2	6	8
8. Processing of tomato juice	1.	Carry out reception			0.15	0.53	0.68
	2.	Carry out washing			0.15	0.43	0.58
	3.	Carry out control			0.15	0.42	0.57
	4.	Carry out cutting			0.15	0.42	0.57
	5.	Carry out preheating			0.14	0.42	0.56
	6.	Carry out juice extraction			0.14	0.42	0.56
	7.	Carry out refining			0.14	0.42	0.56
	8.	Carry out concentration			0.14	0.42	0.56
	9.	Carry out filling			0.14	0.42	0.56
	10.	Carry out closing			0.14	0.42	0.56
	11.	Carry out pasteurization			0.14	0.42	0.56
	12.	Carry out cooling			0.14	0.42	0.56
	13.	Carry out labeling			0.14	0.42	0.56
	14.	Carry out storage			0.14	0.42	0.56
	Sub total:	14		Sub total:	2	6	8
9. Processing of tomato ketchup/sauce	1.	Carry out reception			0.2	0.4	0.6
	2.	Carry out sorting			0.2	0.4	0.6
	3.	Obtain wholesome red tomatoes			0.1	0.4	0.5
	4.	Carry out soaking and washing			0.1	0.4	0.5
	5.	Carry out coring and slicing			0.1	0.4	0.5

	6.	Carry out heating and crushing			0.1	0.4	0.5
	7.	Carry out pulping			0.1	0.3	0.4
	8.	Obtain tomato pulp			0.1	0.3	0.4
	9.	Add spices, sugar, salt, onion, garlic, vinegar, and thickener			0.1	0.3	0.4
	10.	Carry out cooking and concentration			0.1	0.3	0.4
	11.	Pass the mass through finisher			0.1	0.3	0.4
	12.	Add preservatives			0.1	0.3	0.4
	13.	Carry out filling (in bottles)			0.1	0.3	0.4
	14.	Carry out low pasteurization			0.1	0.3	0.4
	15.	Carry out cleaning of the bottles			0.1	0.3	0.4
	16.	Carry out labeling			0.1	0.3	0.4
	17.	Carry out packing			0.1	0.3	0.4
	18.	Carry out marketing			0.1	0.3	0.4
	Sub total:	18		Sub total:	2	6	8
10. Processing of dried green beans	1.	Carry out reception			0.3	0.7	1.0
	2.	Carry out washing			0.3	0.7	1.0
	3.	Obtain cutting			0.2	0.7	0.9
	4.	Carry out blanching			0.2	0.7	0.9
	5.	Carry out cooling			0.2	0.7	0.9
	6.	Carry out sulphiting			0.2	0.7	0.9
	7.	Carry out drying			0.2	0.6	0.8
	8.	Carry out packing			0.2	0.6	0.8
	9.	Carry out storage			0.2	0.6	0.8
	Sub total:	9			2	6	8
11. Processing of dried okra	1.	Carry out reception			0.2	0.6	0.8
	2.	Carry out washing			0.2	0.6	0.8
	3.	Carry out trimming			0.2	0.6	0.8
	4.	Obtain cutting			0.2	0.6	0.8
	5.	Carry out blanching			0.2	0.6	0.8
	6.	Carry out cooling			0.2	0.6	0.8
	7.	Carry out sulphiting			0.2	0.6	0.8
	8.	Carry out drying			0.2	0.6	0.8
	9.	Carry out packing			0.2	0.6	0.8
	10.	Carry out storage			0.2	0.6	0.8
	Sub total:	10		Sub total:	2	6	8
12. Processing of dried cabbage	1.	Carry out reception			0.2	0.4	0.6
	2.	Carry out temporary storage			0.2	0.4	0.6
	3.	Carry out cleaning			0.2	0.4	0.6
	4.	Obtain sorting			0.1	0.4	0.5
	5.	Carry out removal of outer leaves and cores			0.1	0.4	0.5
	6.	Carry out pre-washing			0.1	0.4	0.5
	7.	Carry out cutting in quarters			0.1	0.4	0.5
	8.	Carry out shredding			0.1	0.4	0.5
	9.	Carry out washing			0.1	0.4	0.5
	10.	Carry out blanching			0.1	0.3	0.4

		11.	Carry out cooling			0.1	0.3	0.4
		12.	Carry out sulphiting			0.1	0.3	0.4
		13.	Carry out drying			0.1	0.3	0.4
		14.	Carry out sorting			0.1	0.3	0.4
		15.	Carry out control			0.1	0.3	0.4
		16.	Carry out packing			0.1	0.3	0.4
		17.	Carry out storage			0.1	0.3	0.4
	Sub total:		17		Sub total:	2	6	8
3. Bottling and canning of vegetables								
	1. General methods of bottling and canning of vegetables	1.	Perform selection of vegetables			0.1	0.4	0.5
		2.	Perform sorting and grading			0.1	0.4	0.5
		3.	Perform washing			0.1	0.4	0.5
		4.	Perform blanching			0.1	0.4	0.5
		5.	Perform filling and brining			0.1	0.4	0.5
		6.	Perform exhausting			0.1	0.4	0.5
		7.	Perform sealing			0.1	0.4	0.5
		8.	Perform heat processing			0.1	0.4	0.5
		9.	Perform cooling			0.1	0.4	0.5
		10.	Perform labeling and storing			0.1	0.4	0.5
	Sub total:		10		Sub total:	1	4	5
2. Canning and bottling of different vegetables								
		1.	Can/bottle peas			1	4	5
		2.	Can/bottle asparagus			1	4	5
		3.	Can/bottle beans			1	4	5
		4.	Can/bottle cabbage			1	4	5
		5.	Can/bottle cauliflower			1	4	5
		6.	Can/bottle carrot			1	4	5
		7.	Can/bottle mushroom			1	4	5
		8.	Can/bottle bamboo shoot			1	4	5
		9.	Can/bottle tomato			1	4	5
	Sub total:		9		Sub total:	9	36	45
4. Chutneys, sauces and pickles								
		1.	Make/prepare tomato chutney			1	4	5
		2.	Make/prepare tomato sauce			1	4	5
		3.	Make/prepare dried salted pickle of sauerkraut			1	4	5
		4.	Make/prepare dried salted pickle of gundruk			1	4	5
		5.	Make/prepare brined pickle of cucumber			1	4	5
		6.	Make/prepare brined pickle of onion			1	4	5
		7.	Make/prepare brined pickle of cauliflower			1	4	5
		8.	Make/prepare oiled pickle of cucumber			1	4	5
		9.	Make/prepare oiled pickle of radish			1	4	5
	Sub total:		9		Sub total:	9	36	45
5. Tomato products								
	1. Tomato juice	1.	Perform selection of tomato fruit			1	3	4
		2.	Perform washing			1	3	4
		3.	Perform trimming			1	3	4

	4.	Perform crushing			1	3	4
	5.	Perform pulping			1	3	4
	6.	Perform extraction of juice			1	3	4
	7.	Perform addition of salt and sugar			1	3	4
	8.	Perform bottling or canning			1	3	4
	Sub total:	8		Sub total:	8	24	32
2. Tomato ketchup	1.	Perform selection of tomato fruit			1	3	4
	2.	Perform washing			1	3	4
	3.	Perform trimming			1	3	4
	4.	Perform crushing			1	3	4
	5.	Perform pulping			1	3	4
	6.	Extract juice			1	3	4
	7.	Perform juice standardization			1	3	4
	8.	Prepare recipe for ketchup (ingredients with their quantity)			1	3	4
	9.	Perform addition of ingredients			1	3	4
	10.	Perform cooking and concentration			1	3	4
	11.	Perform bottling			1	3	4
	Sub total:	11		Sub total:	11	33	44
3. Tomato sauce	1.	Perform selection of tomato fruit			1	3	4
	2.	Perform washing			1	3	4
	3.	Perform trimming			1	3	4
	4.	Perform crushing			1	3	4
	5.	Perform pulping			1	3	4
	6.	Extract juice			1	3	4
	7.	Perform juice standardization			1	3	4
	8.	prepare recipe for sauce (ingredients with their quantity)			1	3	4
	9.	Perform addition of ingredients			1	3	4
	10.	Perform cooking and concentration			1	3	4
	11.	Perform bottling			1	3	4
	Sub total:	11		Sub total:	11	33	44
6. Drying and dehydration of vegetables	1.	Perform washing (preparation work)			1	2	3
	2.	Perform peeling (preparation work)			1	2	3
	3.	Perform slicing (preparation work)			1	2	3
	4.	Perform blanching			1	2	3
	5.	Perform sulphiting			1	2	3
	6.	Perform drying			1	2	3
	7.	Prepare schedule of drying of different vegetables			1	2	3
	Sub total:	7		Sub total:	7	14	21
7. Storage of vegetables	1.	Make cellar storage			1	2	3
	2.	Perform cellar storage of vegetable			1	2	3
	3.	Make cool chamber			1	2	3
	4.	Perform cool chamber storage of vegetable			1	2	3

	5.	Perform cold storage of vegetable			1	2	3
	6.	Perform freezing storage of vegetable			1	2	3
	Sub total:	6		Sub total:	6	12	18
8. Managing processing activities/unit and marketing							
1. Vegetable processing activities	1.	Plan for vegetable processing activities			0.25	0.25	0.5
	2.	Budget vegetable processing activities			0.25	0.25	0.5
	3.	Organize vegetable processing activities			0.25	0.25	0.5
	4.	Direct vegetable processing activities			0.25	0.25	0.5
	5.	Control vegetable processing activities			0.25	0.25	0.5
	6.	Manage wastages			0.25	0.25	0.5
	7.	Communicate with others			0.25	0.25	0.5
	8.	Develop professionally			0.25	0.25	0.5
	Sub total:	8		Sub total:	2	2	4
2. Vegetable processing unit							
	1.	Meet legal requirements			0.17	0.4	0.57
	2.	Prepare investment plan			0.17	0.4	0.57
	3.	Select factory site			0.17	0.4	0.57
	4.	Prepare a plan of a fruit preservation factory			0.17	0.4	0.57
	5.	Lay out a canning line			0.17	0.3	0.47
	6.	Lay out a juice plant			0.17	0.3	0.47
	7.	Manage factory buildings			0.17	0.3	0.47
	8.	Manage water supply / drainage			0.17	0.3	0.47
	9.	Manage manpower			0.16	0.3	0.46
	10.	Manage machinery / equipment			0.16	0.3	0.46
	11.	Run vegetable processing activities			0.16	0.3	0.46
	12.	Maintain vegetable processing activities			0.16	0.3	0.46
	Sub total:	12		Sub total:	2	4	6
3. Marketing							
	1.	Collect demand of vegetable products			0.3	0.2	0.5
	2.	Analyze demand of vegetable products			0.3	0.2	0.5
	3.	Design vegetable products			0.3	0.2	0.5
	4.	Price vegetable products			0.3	0.2	0.5
	5.	Place vegetable products			0.3	0.2	0.5
	6.	Promote vegetable products			0.3	0.2	0.5
	7.	Sale vegetable products			0.3	0.2	0.5
	8.	Record sales			0.3	0.2	0.5
	9.	Calculate profit / loss			0.3	0.2	0.5
	10.	Prepare reinvestment plan			0.3	0.2	0.5
	Sub total:	10		Sub total:	3	2	5
	All total:	347		All total:	102	288	390