

**Curriculum**  
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**O**  
**R**  
**Herb Processor**



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

This curriculum for **herb processor** is designed to produce lower level technical workforce equipped with knowledge and skills related to **herb processing**. It makes the trainees able to get opportunities for wage and self-employment in the related occupational field.

## **Aim**

To produce lower level **agriculture** workers (**herb processors**) able to provide **herb processing** services in the community being an entrepreneur/employee/self employed.

## **Objectives**

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

- To collect/ dry/ store crude drugs
- To prevent adulteration
- To perform evaluation of crude drugs
- To obtain drugs from a plant
- To herbal products
- To perform marketing of herb & herbal products

## **Course description**

This curriculum provides skills & knowledge necessary for **herb processor**. There will be both demonstration by instructors/trainers and opportunity by trainees to perform skills/tasks specified in this curriculum. Trainees will practice & learn skills using typical tools, materials, equipment & machines necessary for the program.

After successful completion of this program the trainees will be equipped with the knowledge and skills related to introduction to herbs; collection, drying, & storage of crude drugs; adulteration and its prevention; evaluation of crude drugs; obtaining drugs from a plant; preparation of herbal products; and marketing herb & herbal products.

## Course structure

(Herb processor)

Module/ sub modules	Nature	Time			Marks		
		Th	Pr.	Tot.	Th	Pr.	Tot.
1. Introduction-9	T + P	<b>9</b>	<b>18</b>	<b>27</b>	<b>4</b>	<b>16</b>	<b>20</b>
2. Collection, drying, & storage of crude drugs	T + P	<b>26</b>	<b>72</b>	<b>98</b>	<b>15</b>	<b>60</b>	<b>75</b>
1. Collection of crude drugs-11	T + P	11	33	44			
2. Drying of crude drugs-9	T + P	9	27	36			
3. Storage of crude drugs-6	T + P	6	12	18			
3. Adulteration and its prevention	T + P	<b>6</b>	<b>12</b>	<b>18</b>	<b>4</b>	<b>16</b>	<b>20</b>
1. Adulteration-3	T + P	3	6	9			
2. Preventing adulteration-3	T + P	3	6	9			
4. Evaluation of crude drugs-5	T + P	<b>5</b>	<b>15</b>	<b>20</b>	<b>4</b>	<b>16</b>	<b>20</b>
5. Obtaining drugs from a plant-13	T + P	<b>13</b>	<b>26</b>	<b>39</b>	<b>5</b>	<b>20</b>	<b>25</b>
6. Preparation of herbal products	T + P	<b>34</b>	<b>130</b>	<b>164</b>	<b>24</b>	<b>96</b>	<b>120</b>
1. Methods for preparation of Herbs-2	T + P	1	8	9			
2. Herbal preparations-6	T + P	6	18	24			
3. Herbal formulas-13	T + P	13	26	39			
4. Preparation of herbal medicine-13	T + P	14	78	92			
7. Marketing herb & herbal products-8	T + P	<b>8</b>	<b>16</b>	<b>24</b>	<b>4</b>	<b>16</b>	<b>20</b>
101- Total:		<b>101</b>	<b>289</b>	<b>390</b>	<b>60</b>	<b>240</b>	<b>300</b>
8. Common module	T + P	<b>14</b>	<b>56</b>	<b>70</b>	<b>10</b>	<b>40</b>	<b>50</b>
1. Applied math	T + P	4	16	20			
2. Occupational health and safety	T + P	2	8	10			
3. First aid	T + P	1	4	5			
4. HIV/AIDS	T + P	1	4	5			
5. Communication	T + P	2	8	10			
6. Small enterprise development	T + P	4	16	20			
<b>All total:</b>		<b>115</b>	<b>345</b>	<b>460</b>	<b>70</b>	<b>280</b>	<b>350</b>

**Duration**

The total duration of the course will be of 390 hours (three months) of specialized modules plus 70 hours of a common module.

**Target group**

All interested individuals in the field of agriculture with educational prerequisite of class eight pass.

**Group size**

Maximum of thirty

**Medium of instruction**

Nepali or English or both

**Pattern of attendance**

- 80% attendance in theory
- 90% in practical/ performance

**Focus of curriculum**

This curriculum emphasizes on competency /performance. 80% time is allocated for performance and only 20% for related technical knowledge. So the focus will be on performance of the specified competencies in the curriculum

**Entry criteria**

- Minimum of eight class pass or equivalent
- Minimum of 14 years of age
- Should pass entrance examination

**Follow up suggestions**

In order to assess the success of this program and collect feedbacks/ inputs for the revision of the curriculum a schedule of follow up is suggested as follows:

- First follow up: - Six months after the completion of the program
- Second follow up: - Six months after the completion of the first follow up
- Follow up cycle: - In a cycle of one year after the completion of the second follow up for five years

**Certificate**

The related training institute will provide the certificate of “Herb Processor”. Again, individuals who complete module (s) of the curriculum will receive a certificate of completion of the particular module(s).

**Grading**

- Distinction: passed with 80% or above
- First division: passed with 75% or above

- Second division: passed with 65% or above
- Third division: passed with 60% or above

### **Students evaluation**

- Continuous evaluation of the trainees' performance is to be done by the related instructor/ trainer to ensure the proficiency over each competency under each of the sub-module.
- Related technical knowledge learnt by trainees will be evaluated through written or oral tests.
- Trainees must secure minimum marks of 60% in an average of both theory and practical evaluations.
- There will be three internal evaluations and one final evaluation in each module.
- The entrance test will be conducted by the concerned training institute

### **Trainers qualification**

- I. Sc. Ag or equivalent in related field
- Good communicative and instructional skills
- Experience in related field

### **Trainer-trainees ratio**

- 1:10 for practical classes
- For theory, as per the class room situation

### **Suggestions for instructor**

#### **Suggestions for instruction**

- 1. Select objectives**
  - Write objectives of cognitive domain
  - Write objectives of psychomotor domain
  - Write objectives of affective domain
- 2. Select subject matter**
  - Study subject matter in detail
  - Select content related to cognitive domain
  - Select content related to psychomotor domain
  - Select content related to affective domain
- 3. Select instructional methods**
  - Teacher centered methods: like lecture, demonstration, questions answer inquiry, induction and deduction methods.
  - Student initiated methods like experimental, field trip/excursion, discovery, exploration, problem solving, and survey methods.
  - Interaction methods like discussion, group/team teaching, microteaching and exhibition.
  - Dramatic methods like role play and dramatization
- 4. Select Instructional method (s) on the basis of objectives of lesson plans and KAS domains**

5. Select appropriate educational materials and apply at right Time and place.
6. Evaluate the trainees applying various tools to correspond the KAS domains
7. Make plans for classroom / field work / workshop organization and management.
8. Coordinate among objectives, subject matter and instructional methods.
9. Prepare lesson plan for Theory and Practical classes.
10. Deliver /conduct instruction / program
11. Evaluate instruction/ program

### **Suggestion for the performance evaluation of the trainees**

1. Perform task analysis
2. Develop a detail task performance checklist
3. Perform continuous evaluation of the trainees by applying the performance checklist.

### **Suggestion for skill training**

Demonstrate performance

1. Demonstrate task performance in normal speed
2. Demonstrate slowly with verbal description of each and every step in the sequence of activity of the task performance using question and answer techniques.
3. Repeat 2 for the clarification on trainees demand if necessary
4. Perform fast demonstration of the task.

Provide trainees the opportunities to practice the task performance demonstration

1. Provide trainees to have guided practice
2. Create environment for practicing the demonstrated task performance
3. Guide the trainees in each and every step of task performance
4. Provide trainees to repeat and repeat as per the need to be proficient on the given task performance
5. Switch to another task demonstration if and only trainees developed proficiency in the task performance.

### **Other suggestions**

1. Apply principles of skill training
2. Allocate 20% Time for Theory classes and 80% Time for task performance while delivering instructions
3. Apply principles of adult learning
4. Apply principles of intrinsic motivation
5. Facilitate maximum trainees involvement in learning and task performance activities
6. Instruct the trainees on the basis of their existing level of knowledge, skills and attitude.

## **List of modules & sub modules**

Module: 1: Introduction  
Module: 2: Collection, drying, & storage of crude drugs  
Sub module: 1: Collection of crude drugs  
Sub module: 2: Drying of crude drugs  
Sub module: 3: Storage of crude drugs  
Module: 3: Adulteration and its prevention  
Sub module: 1: Adulteration  
Sub module: 2: Preventing adulteration  
Module: 4: Evaluation of crude drugs  
Module: 5: Obtaining drugs from a plant  
Module: 6: Preparation of herbal products  
Sub module: 1: Methods for preparation of Herbs  
Sub module: 2: Herbal preparations  
Sub module: 3: Herbal formulas  
Sub module: 4: Preparation of herbal medicine  
Module: 7: Marketing herb & herbal products  
Module: 8: Common module  
Sub module: 1: Applied math  
Sub module: 2: Occupational health and safety  
Sub module: 3: First aid  
Sub module: 4: HIV/AIDS  
Sub module: 5: Communication  
Sub module: 6: Small enterprise development

## Details of modules and sub modules

<b>Module:1: Introduction</b>						
	<b>Description:</b> It deals with the knowledge and skills related to the introduction of herbs.					
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To define herbs</li> <li>• To explain origin of the word “herb”</li> <li>• To explain why herbs are grown?</li> <li>• To Enlist uses of herbs</li> <li>• To identify Types of Herbs</li> <li>• To classify of herbs</li> <li>• To cultivate herbs</li> <li>• To Harvest herbs</li> <li>• To be familiar with Marketing of herbs</li> </ul>					
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
	Th.( 9hrs) + Pr.(18 hrs) = Tot.( 27 hrs)				Time( hrs )	
SN	Tasks or skills/ steps		Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Define herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Obtain related reading materials</li> <li>• Collect definitions of herbs</li> <li>• Analyze the definitions</li> <li>• Write a comprehensive definition of herbs</li> <li>• Take precautions</li> <li>• keep records</li> </ul>		<u>Definition of herbs:</u> <ul style="list-style-type: none"> <li>❖ Collecting definitions of herbs</li> <li>❖ Analyzing definitions</li> <li>❖ Writing comprehensive definition of herbs</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
2.	<u>Explain origin of the word “herb”</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Obtain related reading materials</li> <li>• Study the related reading materials</li> <li>• Analyze the related reading materials</li> <li>• Identify the origin of the word “herb”</li> <li>• State the origin of the word “herb”</li> <li>• Take precautions</li> </ul>		<u>Origin of the word “herb”:</u> <ul style="list-style-type: none"> <li>❖ Origin of the word “herb”:</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3

	<ul style="list-style-type: none"> <li>• keep records</li> </ul>					
3.	<u>Explain why herbs are grown?</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Obtain related reading materials</li> <li>• Study the related reading materials</li> <li>• Analyze the related reading materials</li> <li>• Identify why herbs are grown?</li> <li>• State why herbs are grown?</li> <li>• Take precautions</li> <li>• keep records</li> </ul>		<u>Why herbs are grown?:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Why herbs are grown?</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
4.	<u>Enlist uses of herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Obtain related reading materials</li> <li>• Study the related reading materials</li> <li>• Analyze the related reading materials</li> <li>• Identify uses of herbs</li> <li>• List uses of herbs</li> <li>• Take precautions</li> <li>• keep records</li> </ul>		<u>Uses of herbs:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Nutritional value</li> <li>❖ Adding piquancy to cooking</li> <li>❖ Use for fragrance</li> <li>❖ Use for decoration</li> <li>❖ Medicinal use</li> <li>❖ Ritual uses</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
5.	<u>Identify types of herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• List types of herbs</li> <li>• Identify Annual herbs</li> <li>• Identify Perennial herbs</li> <li>• Identify Biennial herbs</li> <li>• Take precautions</li> <li>• keep records</li> </ul>		<u>Types of herbs:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Annual</li> <li>❖ Perennial</li> <li>❖ Biennial</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
6.	<u>Classify herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Identify system of classification</li> <li>• Name herbs</li> <li>• Classify herbs</li> <li>• Take precautions</li> <li>• keep records</li> </ul>		<u>Classification of herbs:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Names of herb</li> <li>❖ Classification as annuals/biennials/perennials</li> <li>❖ Comments/uses</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3

7.	<u>Be familiar with the cultivation of herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Be familiar with the cultivation of herbs including: <ul style="list-style-type: none"> <li>○ Planting</li> <li>○ Weed Control</li> <li>○ Fertilizer</li> <li>○ Irrigation</li> </ul> </li> <li>• Take precautions</li> <li>• keep records</li> </ul>	<u>Cultivation of herbs:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Planting</li> <li>❖ Weed Control</li> <li>❖ Fertilizer</li> <li>❖ Irrigation</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
8.	<u>Be familiar with harvesting of herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Be familiar with harvesting for fresh market</li> <li>• Be familiar with harvesting for dried market</li> <li>• Be familiar with harvesting of fresh herbs</li> <li>• Be familiar with harvesting of crude dried herbs</li> <li>• Take precautions</li> <li>• keep records</li> </ul>	<u>Harvesting:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Harvesting for fresh market</li> <li>❖ Harvesting for dried market</li> <li>❖ Handling of fresh herbs</li> <li>❖ Handling of crude dried herbs</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
9.	<u>Be familiar with marketing of herbs</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Be familiar with herb trade</li> <li>• Be familiar with Market of herbs</li> <li>• Be familiar with costing and pricing <ul style="list-style-type: none"> <li>▪ Be familiar with demand and supply</li> </ul> </li> <li>• Be familiar with marketing scheme/plan</li> <li>• Take precautions</li> <li>• keep records</li> </ul>	<u>Marketing:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Herb trade</li> <li>❖ Market of herbs</li> <li>❖ Costing and pricing</li> <li>❖ Demand and supply</li> <li>❖ Marketing scheme/plan</li> <li>❖ Precautions to be taken</li> <li>❖ Record keeping</li> </ul>	1	2	3
Total:			9	18	27
<b>Module: 2: Collection, drying, &amp; storage of crude drugs</b>					

	<b>Description:</b> It deals with the knowledge and skills related to the collection, drying, & storage of crude drugs.				
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To Collection of crude drugs</li> <li>• To Drying of crude drugs</li> <li>• To Storage of crude drugs</li> </ul>				
	<b>Sub modules:</b> <ol style="list-style-type: none"> <li>1. Collection of crude drugs</li> <li>2. Drying of crude drugs</li> <li>3. Storage of crude drugs</li> </ol>				
	<b>Sub module: 1: Collection of crude drugs</b>				
	<b>Description:</b> It deals with the knowledge and skills related to the Collection of crude drugs.				
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To identify sources of crude drugs</li> <li>• To collect crude drugs</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(11 hrs) + Pr.(33 hrs) = Tot.(44 hrs)			Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Identify sources of crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify wild sources of crude drugs</li> <li>▪ Identify cultivated sources of crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Sources of crude drugs:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Wild sources</li> <li>❖ Cultivated sources</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
2.	<u>Enlist/identify conditions for collecting crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify Season for collecting crude drugs</li> <li>▪ Identify Stage of development for collecting crude drugs</li> <li>▪ Identify Age of herbs for collecting crude drugs</li> <li>▪ Identify Existing environmental conditions for collecting crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Conditions for collecting crude drugs:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Season as a condition for collecting crude drugs</li> <li>❖ Stage of development as a condition for collecting crude drugs</li> <li>❖ Age as a condition for collecting crude drugs</li> <li>❖ Existing environmental conditions- existing environment as a condition for collecting crude drugs</li> </ul>	1	3	4

		<ul style="list-style-type: none"> <li>❖ Maximum concentration of active constituents as a condition for collecting crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
3.	<u>Collect roots / rhizomes</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Collect annual roots / rhizomes</li> <li>▪ Collect biennial roots / rhizomes</li> <li>▪ Collect perennial roots / rhizomes</li> <li>▪ Perform Transverse slicing</li> <li>▪ Perform Longitudinal slicing</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of roots and rhizomes:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Collection of annual roots and rhizomes</li> <li>❖ Collection of biennial roots and rhizomes</li> <li>❖ Collection of perennial roots and rhizomes</li> <li>❖ Transverse slicing</li> <li>❖ Longitudinal slicing</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
4.	<u>Collect leaves</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify herbs to collect leaves</li> <li>▪ Identify leaves to be collected</li> <li>▪ Identify stage of plant for leaves collection</li> <li>▪ Collect leaves</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of leaves:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Leaves collection before early part of flowering</li> <li>❖ Leaves collection during early part of flowering</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
5.	<u>Collect stems and wood</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify plant to collect stems and wood</li> <li>▪ Identify stems and wood to be collected</li> <li>▪ Identify stage of plant for stems and wood collection</li> <li>▪ Collect stems and wood</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of stems and wood:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Collection of stems after the development of leaves</li> <li>❖ Collection of wood [including xylem tissues] before exhaustion of juice</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4

6.	<u>Collect barks</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify plant to collect barks</li> <li>▪ Identify barks to be collected</li> <li>▪ Identify stage of plant for barks collection</li> <li>▪ Collect barks</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of barks:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying plant to collect barks</li> <li>❖ Identifying barks to be collected</li> <li>❖ Identifying stage of plant for barks collection</li> <li>❖ Collecting barks</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
7.	<u>Identify season and time of collection</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify season of collection</li> <li>▪ Identify time of collection</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Season and time of collection:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Collection method s- Felling, Uprooting, Coppicing</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
8.	<u>Collect flowers</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify herbs to collect flowers</li> <li>▪ Identify flowers to be collected</li> <li>▪ Identify stage of plant for flowers collection</li> <li>▪ Collect flowers</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of flowers:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Collection before pollination</li> <li>❖ Collection before their full expansion ( bud condition )</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
9.	<u>Collect fruits</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify plant to collect fruits</li> <li>▪ Identify fruits to be collected</li> <li>▪ Identify stage of plant for fruits collection</li> <li>▪ Collect fruits</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of fruits:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Ripen fruits collection</li> <li>❖ Half ripen but fully grown fruits collection</li> <li>❖ Collection before dehiscence</li> <li>❖ After full maturity</li> </ul>	1	3	4

		<ul style="list-style-type: none"> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
10.	<u>Collect herbs/whole plants after their full growth</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify plant to collect herbs/whole plant after their full growth</li> <li>▪ Identify stage of plant for herbs/whole plant collection after their full growth</li> <li>▪ Collect herbs/whole plant</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of herbs/whole plants after their full growth:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying plant to collect herbs/whole plant after their full growth</li> <li>❖ Identifying stage of plant for herbs/whole plant collection after their full growth</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
11.	<u>Collect unorganized drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify time of collection for resins</li> <li>▪ Identify time of collection for gums</li> <li>▪ Identify time of collection for latices Collect resins</li> <li>▪ Carry out incision method of collection</li> <li>▪ Carry out puncture method of collection</li> <li>▪ Collect gums</li> <li>▪ Collect latices</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Collection of unorganized drugs:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Unorganized drugs</li> <li>❖ Time of collection</li> <li>❖ Methods of collection <ul style="list-style-type: none"> <li>○ Incision method of collection</li> <li>○ Puncture method of collection</li> </ul> </li> <li>❖ Collection of resins</li> <li>❖ Collection of gums</li> <li>❖ Collection of latices</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
		Total:	11	33	44
<b>Sub module: 2: Drying of crude drugs</b>					
<b>Description:</b> It deals with the knowledge and skills related to the drying of crude drugs.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To list objectives of drying crude drugs</li> <li>• To state process of drying</li> <li>• To perform natural dryings</li> <li>• To perform artificial dryings</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the					

following tasks/skills/steps together with their related technical knowledge:					
Th.( 9hrs) + Pr.(27 hrs) = Tot.( 36 hrs)				Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Enlist objectives of drying crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify objectives of drying crude drugs</li> <li>▪ Enlist objectives of drying crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Objectives of drying crude drugs:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Objectives of drying crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
2.	<u>Be familiar with the processes of drying crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify processes of drying crude drugs</li> <li>▪ Enlist processes of drying crude drugs</li> <li>▪ Be familiar with the processes of drying crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Processes of drying:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying processes of drying crude drugs</li> <li>❖ Enlisting processes of drying crude drugs</li> <li>❖ Being familiar with the processes of drying crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
3.	<u>Be familiar with the natural processes of drying crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify natural processes of drying crude drugs</li> <li>▪ Be familiar with the natural processes of drying crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Natural drying:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ The natural processes of drying crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
4.	<u>Perform sun drying of crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be sun dried</li> <li>▪ Obtain crude drugs to be sun dried</li> <li>▪ Prepare/arrange for sun drying</li> <li>▪ Sun dry the crude drugs</li> </ul>	<u>Sun drying:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be sun dried</li> <li>❖ Obtaining crude drugs to be sun dried</li> <li>❖ Preparing /arranging for sun</li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p>drying</p> <ul style="list-style-type: none"> <li>❖ Sun drying the crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
5.	<p><u>Perform shade drying of crude drugs</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be shade dried</li> <li>▪ Obtain crude drugs to be shade dried</li> <li>▪ Prepare/arrange for shade drying</li> <li>▪ Shade dry the crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p><u>Shade drying:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be shade dried</li> <li>❖ Obtaining crude drugs to be shade dried</li> <li>❖ Preparing /arranging for shade drying</li> <li>❖ Shade drying the crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
6.	<p><u>Be familiar with the artificial processes of drying crude drugs</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify artificial processes of drying crude drugs</li> <li>▪ Be familiar with the artificial processes of drying crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p><u>Artificial drying:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying artificial processes of drying crude drugs</li> <li>❖ Being familiar with the artificial processes of drying crude drugs</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
7.	<p><u>Perform drying of crude drugs in an oven/tray dryers</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be dried in an oven/tray dryer</li> <li>▪ Obtain crude drugs to be dried in an oven/tray dryer</li> <li>▪ Set oven/tray dryer</li> <li>▪ Prepare for drying of crude drugs in an oven/tray dryer</li> </ul>	<p><u>Drying in an oven/tray dryers :</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be dried in an oven/tray dryer</li> <li>❖ Obtaining crude drugs to be dried in an oven/tray dryer</li> <li>❖ Setting oven/tray dryer</li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>▪ Dry crude drugs in an oven/tray dryer</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Preparing for drying of crude drugs in an oven/tray dryer</li> <li>❖ Drying crude drugs in an oven/tray dryer</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
8.	<u>Perform drying of crude drugs in dryers</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be dried in dryers</li> <li>▪ Obtain crude drugs to be dried in dryers</li> <li>▪ Set dryers</li> <li>▪ Prepare for drying of crude drugs in dryers</li> <li>▪ Dry crude drugs in dryers</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Drying in dryers:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be dried in dryers</li> <li>❖ Obtaining crude drugs to be dried in dryers</li> <li>❖ Setting dryers</li> <li>❖ Preparing for drying of crude drugs in dryers</li> <li>❖ Drying crude drugs in dryers</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
9.	<u>Perform drying of crude drugs in spray dryers</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be dried in spray dryers</li> <li>▪ Obtain crude drugs to be dried in spray dryers</li> <li>▪ Set spray dryers</li> <li>▪ Prepare for drying of crude drugs in spray dryers</li> <li>▪ Dry crude drugs in spray dryers</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Drying in spray dryers:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be dried in spray dryers</li> <li>❖ Obtaining crude drugs to be dried in spray dryers</li> <li>❖ Setting spray dryers</li> <li>❖ Preparing for drying of crude drugs in spray dryers</li> <li>❖ Drying crude drugs in spray dryers</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
		Total:	9	27	36
<b>Sub module: 3: Storage of crude drugs</b>					

	<b>Description:</b> It deals with the knowledge and skills related to the storage of crude drugs.				
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To be familiar with moisture factor consideration during storage of crude drugs</li> <li>• To be familiar with light factor consideration during storage of crude drugs</li> <li>• To be familiar with temperature factor consideration during storage of crude drugs</li> <li>• To be familiar with moisture and temperature combined factor consideration during storage of crude drugs</li> <li>• To be familiar with oxygen of air factor consideration during storage of crude drugs</li> <li>• To be familiar with living organisms factor consideration during storage of crude drugs</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(6 hrs) + Pr.(12 hrs) = Tot.(18 hrs)			Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Store crude drugs considering moisture factor during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider moisture factor</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs considering moisture factor during storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Moisture factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Conceding moisture factor</li> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs considering moisture factor during storage</li> <li>❖ Precautions to be taken <ul style="list-style-type: none"> <li>▪ Records keeping</li> </ul> </li> </ul>	1	2	3
2.	<u>Store crude drugs considering light factor during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider light factor</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs considering light factor during storage</li> <li>▪ Take precautions</li> </ul>	<u>Light factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Considering light factor</li> </ul>	1	2	3

	<ul style="list-style-type: none"> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs considering light factor during storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
3.	<u>Store crude drugs considering temperature factor during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider temperature factor</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs considering temperature factor during storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Temperature factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Considering temperature factor</li> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs considering temperature factor during storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
4.	<u>Store crude drugs considering moisture and temperature combined factor during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider moisture and temperature combined factor</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs considering moisture and temperature combined factor during storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Moisture and temperature combined factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Considering moisture and temperature combined factor</li> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs considering moisture and temperature combined factor during storage</li> <li>❖ Precautions to be taken</li> </ul>	1	2	3

		❖ Records keeping			
5.	<u>Store crude drugs considering oxygen of air as a factor during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider oxygen of air as a factor</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs considering oxygen of air as a factor during storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Oxygen of air factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Considering oxygen of air as a factor</li> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs considering oxygen of air as a factor during storage</li> <li>❖ Precautions to be taken <ul style="list-style-type: none"> <li>▪ Records keeping</li> </ul> </li> </ul>	1	2	3
6.	<u>Store crude drugs considering living organisms as factors during storage</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be stored</li> <li>▪ Obtain crude drugs to be stored</li> <li>▪ Consider living organisms as factors</li> <li>▪ Prepare for storing crude drugs</li> <li>▪ Store crude drugs living organisms as factors during storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Living organisms factor consideration during storage of crude drugs</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to be stored</li> <li>❖ Obtaining crude drugs to be stored</li> <li>❖ Considering living organisms as factors</li> <li>❖ Preparing for storing crude drugs</li> <li>❖ Storing crude drugs living organisms as factors during storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
		Total:	6	12	18
<b>Module: 3: Adulteration and its prevention</b>					
<b>Description:</b> It deals with the knowledge and skills related to adulteration and its prevention.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To be familiar with adulteration</li> <li>• To be familiar with prevention of adulteration</li> </ul>					

	<b>Sub modules:</b>				
	1. Adulteration				
	2. Preventing adulteration				
	<b>Sub module: 1: Adulteration</b>				
	<b>Description:</b> It deals with the knowledge and skills related to the adulteration of crude drugs.				
	<b>Objectives:</b> After its completion the trainees will be able:				
	<ul style="list-style-type: none"> <li>• To be familiar with the concept of adulteration</li> <li>• To be familiar with the causes of adulteration</li> <li>• To be familiar with means of adulterating</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(3 hrs) + Pr.( 6hrs) = Tot.( 9 hrs)			Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Be familiar with the concept of adulteration</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Be familiar with Incorporation of impurities</li> <li>▪ Be familiar with spoilage</li> <li>▪ Be familiar with deterioration</li> <li>▪ Be familiar with admixture</li> <li>▪ Be familiar with sophistication</li> <li>▪ Be familiar with substitution</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Adulteration</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Incorporation of impurities</li> <li>❖ Spoilage</li> <li>❖ Deterioration</li> <li>❖ Admixture</li> <li>❖ Sophistication</li> <li>❖ Substitution</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
2.	<u>Enlist causes of adulteration</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Define causes of adulteration</li> <li>▪ List causes of adulteration</li> <li>▪ Be familiar with improper collection as a cause of adulteration</li> <li>▪ Be familiar with imperfect preparation as a cause of adulteration</li> <li>▪ Be familiar with incorrect storage as a cause of adulteration</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Causes of adulteration</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Improper collection</li> <li>❖ Imperfect preparation</li> <li>❖ Incorrect storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
3.	<u>Be familiar with means of adulterating</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Enlist means of adulterating</li> </ul>	<u>Means of adulterating</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> </ul>	1	2	3

	<ul style="list-style-type: none"> <li>▪ Be familiar with substitution of exhausted drugs</li> <li>▪ Be familiar with adulteration due to common vernacular name as a means of adulterating</li> <li>▪ Be familiar with substitution of less valuable parts of same plant as a means of adulterating</li> <li>▪ Be familiar with adulteration with faulty collection as a means of adulterating</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Substitution of exhausted drugs</li> <li>❖ Adulteration due to common vernacular name</li> <li>❖ Substitution of less valuable parts of same plant</li> <li>❖ Adulteration with faulty collection</li> <li>❖ Adulteration due to incorrect storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>				
			Total:	3	6	9
<b>Sub module: 2: Preventing adulteration</b>						
<b>Description:</b> It deals with the knowledge and skills related to the prevention of adulteration of drugs.						
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To Prevent adulteration</li> <li>• To Prevent causes of adulteration</li> <li>• Prevent means of adulterating</li> </ul>						
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:						
			Th.(3 hrs) + Pr.(6 hrs) = Tot.(9 hrs)		Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.	
1.	<u>Prevent adulteration</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Prevent incorporation of impurities</li> <li>▪ Prevent spoilage</li> <li>▪ Prevent deterioration</li> <li>▪ Prevent admixture</li> <li>▪ Prevent sophistication</li> <li>▪ Prevent Substitution</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Preventing adulteration:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Preventing incorporation of impurities</li> <li>❖ Preventing spoilage</li> <li>❖ Preventing deterioration</li> <li>❖ Preventing admixture</li> <li>❖ Preventing sophistication</li> <li>❖ Preventing substitution</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3	
2.	<u>Prevent causes of adulteration</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Prevent improper collection</li> <li>▪ Prevent imperfect preparation</li> <li>▪ Prevent incorrect storage</li> <li>▪ Take precautions</li> </ul>	<u>Preventing causes of adulteration:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Preventing improper</li> </ul>	1	2	3	

	<ul style="list-style-type: none"> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Preventing imperfect preparation</li> <li>❖ Preventing incorrect storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
3.	<u>Prevent means of adulterating</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Prevent substitution of exhausted drugs</li> <li>▪ Prevent adulteration due to common vernacular name</li> <li>▪ Prevent substitution of less valuable parts of same plant</li> <li>▪ Prevent adulteration with faulty collection</li> <li>▪ Prevent adulteration due to incorrect storage</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Preventing means of adulterating:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Preventing substitution of exhausted drugs</li> <li>❖ Preventing adulteration due to common vernacular name</li> <li>❖ Preventing substitution of less valuable parts of same plant</li> <li>❖ Preventing adulteration with faulty collection</li> <li>❖ Preventing adulteration due to incorrect storage</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
		Total:	3	6	9
<b>Module: 4: Evaluation of crude drugs</b>					
<b>Description:</b> It deals with the knowledge and skills related to the evaluation of crude drugs.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To perform Organoleptic evaluation of crude drugs</li> <li>• To perform Microscopical evaluation of crude drugs</li> <li>• To perform Physical evaluation of crude drugs</li> <li>• To perform Chemical evaluation of crude drugs</li> <li>• To perform Biological evaluation of crude drugs</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
Th.(5 hrs) + Pr.( 15 hrs) = Tot.(20 hrs)			Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Perform organoleptic evaluation of crude drugs.</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Obtain crude drugs to be evaluated</li> <li>▪ Arrange for organoleptic evaluation of crude drugs.</li> </ul>	<u>Organoleptic evaluation:</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Obtaining crude drugs to be evaluated</li> <li>❖ Arranging for organoleptic</li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>▪ Carry out organoleptic evaluation of crude drugs.</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p>evaluation of crude drugs.</p> <ul style="list-style-type: none"> <li>❖ Carrying out organoleptic evaluation of crude drugs.</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
2.	<p><u>Perform microscopical evaluation of crude drugs.</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Obtain crude drugs to be evaluated</li> <li>▪ Arrange for microscopical evaluation of crude drugs.</li> <li>▪ Carry out microscopical evaluation of crude drugs.</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p><u>Microscopical evaluation:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Obtain crude drugs to be evaluated</li> <li>❖ Arrange for microscopical evaluation of crude drugs.</li> <li>❖ Carry out microscopical evaluation of crude drugs.</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
3.	<p><u>Perform physical evaluation of crude drugs.</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Obtain crude drugs to be evaluated</li> <li>▪ Arrange for physical evaluation of crude drugs.</li> <li>▪ Carry out physical evaluation of crude drugs.</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p><u>Physical evaluation:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Obtaining crude drugs to be evaluated</li> <li>❖ Arranging for physical evaluation of crude drugs.</li> <li>❖ Carrying out physical evaluation of crude drugs.</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
4.	<p><u>Perform chemical evaluation of crude drugs.</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Obtain crude drugs to be evaluated</li> <li>▪ Arrange for chemical evaluation of crude drugs.</li> <li>▪ Carry out chemical evaluation of crude drugs.</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p><u>Chemical evaluation:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Obtaining crude drugs to be evaluated</li> <li>❖ Arranging for chemical evaluation of crude drugs.</li> <li>❖ Carrying out chemical evaluation of crude drugs.</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	3	4
5.	<p><u>Perform biological evaluation of crude drugs.</u></p> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Obtain crude drugs to be evaluated</li> </ul>	<p><u>Biological evaluation:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Obtaining crude drugs to be</li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>▪ Arrange for biological evaluation of crude drugs.</li> <li>▪ Carry out biological evaluation of crude drugs.</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ evaluated</li> <li>❖ Arranging for biological evaluation of crude drugs.</li> <li>❖ Carrying out biological evaluation of crude drugs.</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>				
			Total:	5	15	20
<b>Module: 5: Obtaining drugs from a plant</b>						
<b>Description:</b> It deals with the knowledge and skills related to the obtaining drugs from a plant.						
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To identify authentic medicinal plant/parts</li> <li>• To perform collection</li> <li>• To perform drying</li> <li>• To perform pulverization</li> <li>• To perform extraction</li> <li>• To perform separation</li> <li>• To perform purification</li> <li>• To perform pure single constituent</li> <li>• To perform biological evaluation</li> <li>• To perform formulation</li> <li>• To identify clinical traits</li> <li>• To gain approval by authority</li> <li>• To perform marketing</li> </ul>						
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:						
			Th.(13 hrs) + Pr.(26 hrs) = Tot.(39 hrs)		Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.	
1.	<u>Identify authentic medicinal plant/parts</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify authentic medicinal plant/parts</li> <li>▪ List authentic medicinal plant/parts</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Authentic medicinal plant/parts</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying authentic medicinal plant/parts</li> <li>❖ Listing authentic medicinal plant/parts</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3	
2.	<u>Be familiar with the collection of crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Identify crude drugs to be collected</li> </ul>	<u>Collection</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Identifying crude drugs to</li> </ul>	1	2	3	

	<ul style="list-style-type: none"> <li>▪ Be familiar with the collection of crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<p>be collected</p> <ul style="list-style-type: none"> <li>❖ Being familiar with the collection of crude drugs</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>			
3.	<u>Be familiar with drying of crude drugs</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ Be familiar with drying of crude drugs</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Drying</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Drying of crude drugs</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
4.	<u>Perform pulverization</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of pulverization</li> <li>▪ Arrange for pulverization</li> <li>▪ Carry out pulverization</li> <li>▪ State application of pulverization</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Pulverization</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for pulverization</li> <li>❖ Carry out pulverization</li> <li>❖ State application of pulverization</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
5.	<u>Perform extraction</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of extraction</li> <li>▪ Arrange for extraction</li> <li>▪ Carry out extraction</li> <li>▪ State application of extraction</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Extraction</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for extraction</li> <li>❖ Carry out extraction</li> <li>❖ State application of extraction</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
6.	<u>Perform separation</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of separation</li> <li>▪ Arrange for separation</li> <li>▪ Carry out separation</li> <li>▪ State application of separation</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Separation</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for separation</li> <li>❖ Carry out separation</li> <li>❖ State application of separation</li> <li>❖ Taking precautions</li> </ul>	1	2	3

		❖ Keeping records			
7.	<u>Perform purification</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of purification</li> <li>▪ Arrange for purification</li> <li>▪ Carry out purification</li> <li>▪ State application of purification</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Purification</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for purification</li> <li>❖ Carry out purification</li> <li>❖ State application of purification</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
8.	<u>Be familiar with pure single constituent</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of pure single constituent</li> <li>▪ Be familiar with pure single constituent</li> <li>▪ State application of pure single constituent</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Pure single constituent</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Be familiar with pure single constituent</li> <li>❖ State application of pure single constituent</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
9.	<u>Perform biological evaluation</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of biological evaluation</li> <li>▪ Arrange for biological evaluation</li> <li>▪ Carry out biological evaluation</li> <li>▪ State application of biological evaluation</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Biological evaluation</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for biological evaluation</li> <li>❖ Carry out biological evaluation</li> <li>❖ State application of biological evaluation</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
10.	<u>Perform formulation</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of formulation</li> <li>▪ Arrange for formulation</li> <li>▪ Carry out formulation</li> </ul>	<u>Formulation</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for formulation</li> </ul>	1	2	3

	<ul style="list-style-type: none"> <li>▪ State application of formulation</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Carry out formulation</li> <li>❖ State application of formulation</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>			
11.	<u>Be familiar with clinical traits</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of clinical traits</li> <li>▪ Be familiar with clinical traits</li> <li>▪ State application of clinical traits</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Clinical traits</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ State concept of clinical traits</li> <li>❖ Be familiar with clinical traits</li> <li>❖ State application of clinical traits</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
12.	<u>Gain approval by authority</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of approval by authority</li> <li>▪ Arrange for gaining approval by authority</li> <li>▪ Carry out gaining approval by authority</li> <li>▪ State application of gaining approval by authority</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Approval by authority</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for gaining approval by authority</li> <li>❖ Carry out gaining approval by authority</li> <li>❖ State application of gaining approval by authority</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
13.	<u>Be familiar with marketing</u> <ul style="list-style-type: none"> <li>▪ Receive instruction</li> <li>▪ State concept of marketing</li> <li>▪ Arrange for marketing</li> <li>▪ Carry out marketing</li> <li>▪ State application of marketing</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	<u>Marketing</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arrange for marketing</li> <li>❖ Carry out marketing</li> <li>❖ State application of marketing</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	2	3
		Total:	13	26	39
<b>Module: 6: Preparation of herbal products</b>					
<b>Description:</b> It deals with the knowledge and skills related to the preparation of herbal					

	products.				
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>To be familiar with the methods preparation of herbs</li> <li>To carryout herbal preparations</li> <li>To be familiar with herbal formulas</li> <li>To prepare herbal medicine</li> </ul>				
	<b>Sub modules:</b> <ol style="list-style-type: none"> <li>Methods for preparation of herbs</li> <li>Herbal preparations</li> <li>Herbal formulas</li> <li>Preparation of herbal medicine</li> </ol>				
<b>Sub module: 1: Methods for preparation of herbs</b>					
	<b>Description:</b> It deals with the knowledge and skills related to the methods for preparation of herbs/herbal products.				
	<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>To be familiar with the aims of preparation of herbs/herbal products</li> <li>To carryout various methods for preparation of herbs/herbal products</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(1 hrs) + Pr.(8 hrs) = Tot.(9 hrs)	Time( hrs )			
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Be familiar with aims of preparation of herbs</u> <ul style="list-style-type: none"> <li>Receive instruction</li> <li>State the objective of herbs as enhancing curative effects</li> <li>State the objective of herbs as reducing toxic effects</li> <li>State the objective of herbs as changing properties of herbs and expand their uses</li> <li>Take precautions</li> <li>Keep records</li> </ul>	<u>Aims of Preparation</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Enhancing curative effects</li> <li>❖ Reducing toxic effects</li> <li>❖ Changing properties of herbs and expand their uses</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	0.5	4	4.5
2.	<u>Be familiar with methods for preparation</u> <ul style="list-style-type: none"> <li>Receive instruction</li> <li>Carry out stir-baking</li> <li>Carry out stir-baking with auxiliary fluid</li> </ul>	<u>Methods for Preparation</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Stir-baking</li> <li>❖ Stir-baking with auxiliary</li> </ul>	0.5	4	4.5

	<ul style="list-style-type: none"> <li>▪ Carry out calcination</li> <li>▪ Carry out roasting</li> <li>▪ Carry out steaming</li> <li>▪ Carry out boiling</li> <li>▪ Carry out water-refining</li> <li>▪ Take precautions</li> <li>▪ Keep records</li> </ul>	fluid <ul style="list-style-type: none"> <li>❖ Calcination</li> <li>❖ Roasting</li> <li>❖ Steaming</li> <li>❖ Boiling</li> <li>❖ Water-refining</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>			
		Total:	1	8	9
<b>Sub module: 2: Herbal preparations</b>					
<b>Description:</b> It deals with the knowledge and skills related to herbal preparations.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To prepare simple syrup</li> <li>• To prepare cold /Standard infusion</li> <li>• To prepare strong / weak decoction</li> <li>• To prepare eyewash and douche</li> <li>• To prepare fresh /dry plant tincture</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
Th.( 6hrs) + Pr.(18 hrs) = Tot.( 24 hrs)			Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Prepare simple syrup</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• State concept of simple syrup</li> <li>• Arrange for the preparation of simple syrup</li> <li>• Carry out preparation of simple syrup</li> <li>• Enlist uses of the syrup</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Simple syrup</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arranging for the preparation of simple syrup</li> <li>❖ Carrying out preparation of simple syrup</li> <li>❖ Enlist uses of the syrup</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	3	4
2.	<u>Prepare infusions</u> <ul style="list-style-type: none"> <li>• Prepare cold infusion               <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of cold infusion</li> <li>○ Arrange for the preparation of cold infusion</li> <li>○ Carry out preparation of cold infusion</li> <li>○ Enlist uses of cold infusion</li> <li>○ Take precautions</li> </ul> </li> </ul>	<u>Infusion</u> <ul style="list-style-type: none"> <li>• Cold infusion</li> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arranging for the preparation of</li> <li>❖ Carrying out preparation of cold infusion</li> <li>❖ Enlisting uses of cold infusion</li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>○ Keep records</li> <li>● <u>Prepare standard infusion</u> <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of standard infusion</li> <li>○ Arrange for the preparation of standard infusion</li> <li>○ Carry out preparation of standard infusion</li> <li>○ Enlist uses of standard infusion</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> <li>● <u>Standard infusion</u></li> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arranging for the preparation of standard infusion</li> <li>❖ Carrying out preparation of standard infusion</li> <li>❖ Enlisting uses of standard infusion</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>			
3.	<p><u>Prepare decoction</u></p> <ul style="list-style-type: none"> <li>● <u>Prepare strong decoction</u> <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of strong decoction</li> <li>○ Arrange for the preparation of strong decoction</li> <li>○ Carry out preparation of strong decoction</li> <li>○ Enlist uses of strong decoction</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> <li>● <u>Prepare weak decoction</u> <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of</li> <li>○ Arrange for the preparation of weak decoction</li> <li>○ Carry out preparation of weak decoction</li> <li>○ Enlist uses of weak decoction</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> </ul>	<p><u>Decoction</u></p> <ul style="list-style-type: none"> <li>❖ <u>Strong decoction</u> <ul style="list-style-type: none"> <li>○ Concept, needs, importance, and application</li> <li>○ Arranging for the preparation of strong decoction</li> <li>○ Carrying out preparation of strong decoction</li> <li>○ Enlisting uses of strong decoction</li> <li>○ Taking precautions</li> <li>○ Keeping records</li> </ul> </li> <li>❖ <u>Weak decoction</u> <ul style="list-style-type: none"> <li>○ Concept, needs, importance, and application</li> <li>○ Arranging for the preparation of weak decoction</li> <li>○ Carrying out preparation of weak decoction</li> <li>○ Enlisting uses of weak decoction</li> <li>○ Taking precautions</li> <li>○ Keeping records</li> </ul> </li> </ul>	1	3	4
4.	<p><u>Prepare eyewash and douche</u></p> <ul style="list-style-type: none"> <li>● Receive instruction</li> </ul>	<p><u>Eyewash and douche</u></p>	1	3	4

	<ul style="list-style-type: none"> <li>• State concept of eyewash and douche</li> <li>• Arrange for the preparation of eyewash and douche</li> <li>• Carry out preparation of eyewash and douche</li> <li>• Enlist uses of eyewash and douche</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arranging for the preparation of eyewash and douche</li> <li>❖ Carrying out preparation of eyewash and douche</li> <li>❖ Enlisting uses of eyewash and douche</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>			
5.	<u>Prepare fresh plant tincture</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• State concept of fresh plant tincture</li> <li>• Arrange for the preparation of fresh plant tincture</li> <li>• Carry out preparation of fresh plant tincture</li> <li>• Enlist uses of fresh plant tincture</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Fresh plant tincture</u> <ul style="list-style-type: none"> <li>❖ Concept, needs, importance, and application</li> <li>❖ Arranging for the preparation of fresh plant tincture</li> <li>❖ Carrying out preparation of fresh plant tincture</li> <li>❖ Enlisting uses of fresh plant tincture</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> </ul>	1	3	4
6.	<u>Prepare dry plant tincture</u> <ul style="list-style-type: none"> <li>• Perform maceration <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of maceration</li> <li>○ Arrange for maceration</li> <li>○ Carry out maceration</li> <li>○ Enlist uses of maceration</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> <li>• <u>Perform percolation</u> <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of percolation</li> <li>○ Arrange for percolation</li> <li>○ Carry out percolation</li> <li>○ Enlist uses of percolation</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> <li>• <u>Prepare fluidextract</u></li> </ul>	<u>Dry plant tincture</u> <ul style="list-style-type: none"> <li>❖ Maceration <ul style="list-style-type: none"> <li>○ Concept and application</li> <li>○ Arranging for maceration</li> <li>○ Carrying out maceration</li> <li>○ Enlisting uses of maceration</li> <li>○ Take precautions</li> </ul> </li> <li>❖ <u>Percolation</u> <ul style="list-style-type: none"> <li>○ Concept, needs, importance, and application</li> <li>○ Arranging for percolation</li> <li>○ Carrying out percolation</li> <li>○ Enlisting uses of percolation</li> <li>○ Taking precautions</li> </ul> </li> </ul>	1	3	4

	<ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of fluidextract</li> <li>○ Arrange for the preparation of fluidextract</li> <li>○ Carry out preparation of fluidextract</li> <li>○ Enlist uses of fluidextract</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> <ul style="list-style-type: none"> <li>● <u>Prepare dry plant tincture</u> <ul style="list-style-type: none"> <li>○ Receive instruction</li> <li>○ State concept of dry plant tincture</li> <li>○ Arrange for the preparation of dry plant tincture</li> <li>○ Carry out preparation of dry plant tincture</li> <li>○ Enlist uses of dry plant tincture</li> <li>○ Take precautions</li> <li>○ Keep records</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ <u>Fluidextract</u> <ul style="list-style-type: none"> <li>○ Concept, needs, importance, and application</li> <li>○ Arranging for the preparation of fluidextract</li> <li>○ Carrying out preparation of fluidextract</li> <li>○ Enlisting uses of fluidextract</li> <li>○ Taking precautions</li> </ul> </li> <li>❖ <u>Preparation of dry plant tincture</u> <ul style="list-style-type: none"> <li>○ Concept, needs, importance, and application</li> <li>○ Arranging for the preparation of dry plant tincture</li> <li>○ Carrying out preparation of dry plant tincture</li> <li>○ Enlisting uses of dry plant tincture</li> <li>○ Taking precautions</li> <li>○ Keeping records</li> </ul> </li> </ul>			
		Total:	6	18	24
<b>Sub module: 3: Herbal formulas</b>					
<b>Description:</b> It deals with the knowledge and skills related to herbal formulas.					
<p><b>Objectives:</b> After its completion the trainees will be able:</p> <ul style="list-style-type: none"> <li>● To Write formulas to prepare herbal medicine for mouth/nose/eyes/ear problems</li> <li>● To Write formulas to prepare herbal medicine for Gastro-intestinal problems</li> <li>● To Write formulas to prepare herbal medicine for Liver/biliary problems</li> <li>● To Write formulas to prepare herbal medicine for Respiratory problems</li> <li>● To Write formulas to prepare herbal medicine for Reproductive problems</li> <li>● To Write formulas to prepare herbal medicine for Urinary tract problems</li> <li>● To Write formulas to prepare herbal medicine for Lymph/immune problems</li> <li>● To Write formulas to prepare herbal medicine for Cardio-vascular problems</li> <li>● To Write formulas to prepare Topical herbal medicine</li> <li>● To Write formulas to prepare herbal medicine for problems of Central nervous system</li> <li>● To Write formulas to prepare herbal medicine for Acute disease</li> <li>● To Write formulas to prepare herbal medicine for Chronic/metabolic problems</li> </ul>					

	<ul style="list-style-type: none"> <li>To Write formulas to prepare herbs for pleasure / fun</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.( 13hrs) + Pr.(26 hrs) = Tot.( 39 hrs)			Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Write formulas to prepare herbal medicine for mouth/nose/eyes/ear problems</u> <ul style="list-style-type: none"> <li>Write herbal formula for Lip and skin butter</li> <li>Write herbal formula for Tooth powder (michaels)</li> <li>Write herbal formula for Tooth powder (jareds)</li> </ul>	<u>Mouth/nose/eyes/ears</u> <ul style="list-style-type: none"> <li>❖ Herbal formula for Lip and skin butter</li> <li>❖ Tooth powder (michaels)</li> <li>❖ Tooth powder (jareds)</li> </ul>	1	2	3
2.	<u>Write formulas to prepare herbal medicine for Gastro-intestinal problems</u> <ul style="list-style-type: none"> <li>Write formula for the preparation of Stomach tea</li> <li>Write formula for the preparation of Laxative tea</li> <li>Write formula for the preparation of Comfrey-mint-lemon tea</li> <li>Write formula for the preparation of Papaya-mint-lemon tea</li> <li>Write formula for the preparation of Colon tonic (modified thomsonian)</li> <li>Write formula for the preparation of Bitter tonic</li> <li>Write formula for the preparation of Ileo-cecal tonic</li> <li>Write formula for the preparation of Catnip-fennel tincture</li> <li>Write formula for the preparation of Neutralizing cordial (modified)</li> </ul>	<u>Gastro-intestinal</u> <ul style="list-style-type: none"> <li>❖ Stomach tea</li> <li>❖ Laxative tea</li> <li>❖ Comfrey-mint-lemon tea</li> <li>❖ Papaya-mint-lemon tea</li> <li>❖ Colon tonic (modified thomsonian)</li> <li>❖ Bitter tonic</li> <li>❖ Ileo-cecal tonic</li> <li>❖ Catnip-fennel tincture</li> <li>❖ Neutralizing cordial (modified)</li> </ul>	1	2	3
3.	<u>Write formulas to prepare herbal medicine for Liver/biliary problems</u> <ul style="list-style-type: none"> <li>Write formulas to prepare</li> </ul>	<u>Liver/biliary</u> <ul style="list-style-type: none"> <li>❖ Liver tonic</li> </ul>	1	2	3

	<p>herbal medicine for Liver problems</p> <ul style="list-style-type: none"> <li>▪ Write formulas to prepare herbal medicine for biliary problems</li> </ul>	<ul style="list-style-type: none"> <li>❖ Robert's biliary formula</li> <li>❖ Alterative tea</li> <li>❖ Liver deficiency tincture</li> <li>❖ Liver excess tincture</li> </ul>			
4.	<p><u>Write formulas to prepare herbal medicine for Respiratory problems</u></p> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Decongestant tea</li> <li>▪ Write formula for the preparation of White pine compound cough syrup</li> <li>▪ Write formula for the preparation of Osha cough syrup</li> <li>▪ Write formula for the preparation of Compound syrup of red root</li> <li>▪ Write formula for the preparation of Winter solstice cough/cold syrup</li> <li>▪ Write formula for the preparation of Monarda honey</li> <li>▪ Write Tonsillitis formula</li> <li>▪ Write Allergy formula</li> </ul>	<p><u>Respiratory</u></p> <ul style="list-style-type: none"> <li>❖ Decongestant tea</li> <li>❖ White pine compound cough syrup</li> <li>❖ Osha cough syrup</li> <li>❖ Compound syrup of red root</li> <li>❖ Winter solstice cough/cold syrup</li> <li>❖ Monarda honey</li> <li>❖ Tonsillitis formula</li> <li>❖ Allergy formula</li> </ul>	1	2	3
5.	<p><u>Write formulas to prepare herbal medicine for Reproductive problems</u></p> <ul style="list-style-type: none"> <li>▪ Write Candida formula</li> <li>▪ Write formula for the preparation of Female balancer</li> <li>▪ Write Menopause: early formula</li> <li>▪ Write Menopause: later formula</li> <li>▪ Write Pms formula, long cycle</li> <li>▪ Write Pms formula, short cycle</li> <li>▪ Write formula for the preparation of Cervical dysplasia suppositories</li> <li>▪ Write formula for the preparation of Hpv (venereal wart) suppositories</li> <li>▪ Write formula for the preparation of Candida douche</li> <li>▪ Write formula for the</li> </ul>	<p><u>Reproductive</u></p> <ul style="list-style-type: none"> <li>❖ Candida formula</li> <li>❖ Female balancer</li> <li>❖ Menopause: early formula</li> <li>❖ Menopause: later formula</li> <li>❖ Pms formula, long cycle</li> <li>❖ Pms formula, short cycle</li> <li>❖ Cervical dysplasia suppositories</li> <li>❖ Hpv (venereal wart) suppositories</li> <li>❖ Candida douche</li> <li>❖ Hayden's viburnum compound(modified)</li> </ul>	1	2	3

	preparation of Hayden's viburnum compound(modified)				
6.	<u>Write formulas to prepare herbal medicine for Urinary tract problems</u> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Urinary tincture (all purpose)</li> <li>▪ Write formula for the preparation of Alkalizing tea</li> </ul>	<u>Urinary tract</u> <ul style="list-style-type: none"> <li>❖ Urinary tincture (all purpose)</li> <li>❖ Alkalizing tea</li> </ul>	1	2	3
7.	<u>Write formulas to prepare herbal medicine for Lymph/immune problems</u> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Lymph tonic</li> <li>▪ Write formula for the preparation of Immune stimulant #1</li> <li>▪ Write formula for the preparation of Immune stimulant #2</li> <li>▪ Write formula for the preparation of Lymph anti-effect (for mumps, mono, etc.)</li> <li>▪ Write Tonsilitis formula</li> <li>▪ Write formula for the preparation of Immune tonic</li> </ul>	<u>Lymph/immune</u> <ul style="list-style-type: none"> <li>❖ Lymph tonic</li> <li>❖ Immune stimulant #1</li> <li>❖ Immune stimulant #2</li> <li>❖ Lymph anti-effect (for mumps, mono, etc.)</li> <li>❖ Tonsilitis formula</li> <li>❖ Immune tonic</li> </ul>	1	2	3
8.	<u>Write formulas to prepare herbal medicine for Cardio-vascular problems</u> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Greaseball hypertension</li> <li>▪ Write Hypotension formula (kidney deficient)</li> <li>▪ Write Tachycardia formula</li> <li>▪ Write formula for the preparation of Circulatory stimulant</li> <li>▪ Write Arteriosclerosis formula (health good, memory bad)</li> </ul>	<u>Cardio-vascular</u> <ul style="list-style-type: none"> <li>❖ Greaseball hypertension</li> <li>❖ Hypotension formula (kidney deficient)</li> <li>❖ Tachycardia formula</li> <li>❖ Circulatory stimulant</li> <li>❖ Arteriosclerosis formula (health good, memory bad)</li> </ul>	1	2	3
9.	<u>Write formulas to prepare Topical herbal medicine</u> <ul style="list-style-type: none"> <li>▪ Write formula for the</li> </ul>	<u>Topical:</u> <ul style="list-style-type: none"> <li>❖ Podophyllin ointment</li> </ul>	1	2	3

	<p>preparation of Podophyllin ointment</p> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Chac salve (calendula, hypericum, arnica,cajebut)</li> <li>▪ Write formula for the preparation of Muscle balm</li> <li>▪ Write formula for the preparation of "Trauma tincture"</li> <li>▪ Write formula for the preparation of Rotgut liniment</li> <li>▪ Write formula for the preparation of Echinacea salve</li> <li>▪ Write formula for the preparation of Golden seal salve</li> </ul>	<ul style="list-style-type: none"> <li>❖ Chac salve (calendula, hypericum, arnica,cajebut)</li> <li>❖ Muscle balm</li> <li>❖ "Trauma tincture"</li> <li>❖ Rotgut liniment</li> <li>❖ Echinacea salve</li> <li>❖ Golden seal salve</li> </ul>			
10.	<p><u>Write formulas to prepare herbal medicine for problems of Central nervous system</u></p> <ul style="list-style-type: none"> <li>▪ Write formula for the preparation of Relaxing tea</li> <li>▪ Write formula for the preparation of Nerve tonic</li> <li>▪ Write formula for the preparation of Speed detox formula</li> <li>▪ Write formula for the preparation of V's nerve tonic</li> <li>▪ Write formula for the preparation of B's antidepressant</li> <li>▪ Write formula for the preparation of K's syrian rue formula</li> <li>▪ Write formula for the preparation of Compound tincture of cannabis (1910)</li> <li>▪ Write formula for the preparation of Post-treatment relaxer</li> <li>▪ Write formula for the preparation of Post-treatment strengthener</li> </ul>	<p><u>Central nervous system</u></p> <ul style="list-style-type: none"> <li>❖ Relaxing tea</li> <li>❖ Nerve tonic</li> <li>❖ Speed detox formula</li> <li>❖ V's nerve tonic</li> <li>❖ B's antidepressant</li> <li>❖ K's syrian rue formula</li> <li>❖ Compound tincture of cannabis (1910)</li> <li>❖ Post-treatment relaxer</li> <li>❖ Post-treatment strengthener</li> </ul>	1	2	3

11.	<u>Write formulas to prepare herbal medicine for Acute disease</u> ▪ Write formula for the preparation of Ego capsules	<u>Acute disease</u> ❖ Ego capsules	1	2	3	
12.	<u>Write formulas to prepare herbal medicine for Chronic/metabolic problems</u> ▪ Write formula for the preparation of Alterative syrup ▪ Write Detox formula	<u>Chronic/metabolic</u> ❖ Alterative syrup ❖ Detox formula	1	2	3	
13.	<u>Write formulas to prepare herbs for pleasure / fun</u> ▪ Write formula for the preparation of Five mint tea ▪ Write formula for the preparation of Root tea ▪ Write formula for the preparation of Flower tea ▪ Write formula for the preparation of Mesomarbles ▪ Write formula for the preparation of Guarana fudge (aka speed fudge)	<u>For pleasure or fun</u> ❖ Five mint tea ❖ Root tea ❖ Flower tea ❖ Mesomarbles ❖ Guarana fudge (aka speed fudge)	1	2	3	
			Total:	13	26	39
<b>Sub module: 4: Preparation of herbal medicine</b>						
<b>Description:</b> It deals with the knowledge and skills related to the preparation of herbal medicine.						
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To prepare herbal medicine for mouth/nose/eyes/ear disorders</li> <li>• To prepare herbal medicine for Gastro-intestinal disorders</li> <li>• To prepare herbal medicine for Liver/biliary disorders</li> <li>• To prepare herbal medicine for Respiratory disorders</li> <li>• To prepare herbal medicine for Reproductive disorders</li> <li>• To prepare herbal medicine for Urinary tract disorders</li> <li>• To prepare herbal medicine for Lymph/immune disorders</li> <li>• To prepare herbal medicine for Cardio-vascular disorders</li> <li>• To prepare Topical herbal medicine</li> </ul>						

	<ul style="list-style-type: none"> <li>To prepare herbal medicine for disorders of Central nervous system</li> <li>To prepare herbal medicine for Acute disease</li> <li>To prepare herbal medicine for Chronic/metabolic disorders</li> <li>To prepare herbs for pleasure / fun</li> </ul>				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(14 hrs) + Pr.(78 hrs) = Tot.( 92 hrs)				
	Time( hrs )				
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Prepare herbal medicine for mouth/nose/eyes/ear disorders</u> <ul style="list-style-type: none"> <li>Prepare Lip and skin butter</li> <li>Prepare Tooth powder (michaels)</li> <li>Prepare Tooth powder (jareds)</li> </ul>	<u>Preparation of herbal medicine for mouth/nose/eyes/ear disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Lip and skin butter</li> <li>❖ Preparation of Tooth powder (michaels)</li> <li>❖ Preparation of Tooth powder (jareds)</li> </ul>	1	6	7
2.	<u>Prepare herbal medicine for gastro-intestinal disorders</u> <ul style="list-style-type: none"> <li>Prepare Stomach tea</li> <li>Prepare Laxative tea</li> <li>Prepare Comfrey-mint-lemon tea</li> <li>Prepare Papaya-mint-lemon tea</li> <li>Prepare Colon tonic (modified thomsonian)</li> <li>Prepare Bitter tonic</li> <li>Prepare Ileo-cecal tonic</li> <li>Prepare Catnip-fennel tincture</li> <li>Prepare Neutralizing cordial (modified)</li> </ul>	<u>Preparation of herbal medicine for gastro-intestinal disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Stomach tea</li> <li>❖ Preparation of Laxative tea</li> <li>❖ Preparation of Comfrey-mint-lemon tea</li> <li>❖ Preparation of Papaya-mint-lemon tea</li> <li>❖ Preparation of Colon tonic (modified thomsonian)</li> <li>❖ Preparation of Bitter tonic</li> <li>❖ Preparation of Ileo-cecal tonic</li> <li>❖ Preparation of Catnip-fennel tincture</li> <li>❖ Preparation of Neutralizing cordial (modified)</li> </ul>	1	6	7
3.	<u>Prepare herbal medicine for Liver/biliary disorders</u> <ul style="list-style-type: none"> <li>Prepare Liver tonic</li> <li>Prepare Robert's biliary formula</li> <li>Prepare Alterative tea</li> <li>Prepare Liver deficiency tincture</li> </ul>	<u>Preparation of herbal medicine for Liver/biliary disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Liver tonic</li> <li>❖ Preparation of Robert's biliary formula</li> <li>❖ Preparation of Alterative tea</li> <li>❖ Preparation of Liver</li> </ul>	1	6	7

	<ul style="list-style-type: none"> <li>▪ Prepare Liver excess tincture</li> </ul>	<p>deficiency tincture</p> <ul style="list-style-type: none"> <li>❖ Preparation of Liver excess tincture</li> </ul>			
4.	<p><u>Prepare herbal medicine for Respiratory disorders</u></p> <ul style="list-style-type: none"> <li>▪ Prepare Decongestant tea</li> <li>▪ Prepare White pine compound cough syrup</li> <li>▪ Prepare Osha cough syrup</li> <li>▪ Prepare Compound syrup of red root</li> <li>▪ Prepare Winter soltice cough/cold syrup</li> <li>▪ Prepare Monarda honey</li> <li>▪ Prepare Tonsilitis formula</li> <li>▪ Prepare Allergy formula</li> </ul>	<p><u>Preparation of herbal medicine for Respiratory disorders</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of Decongestant tea</li> <li>❖ Preparation of White pine compound cough syrup</li> <li>❖ Prepare Osha cough syrup</li> <li>❖ Preparation of Compound syrup of red root</li> <li>❖ Preparation of Winter soltice cough/cold syrup</li> <li>❖ Preparation of Monarda honey</li> <li>❖ Preparation of Tonsilitis formula</li> <li>❖ Preparation of Allergy formula</li> </ul>	1	6	7
5.	<p><u>Prepare herbal medicine for Reproductive disorders</u></p> <ul style="list-style-type: none"> <li>▪ Prepare Candida formula</li> <li>▪ Prepare Female balancer</li> <li>▪ Prepare Menopause: early formula</li> <li>▪ Prepare Menopause: later formula</li> <li>▪ Prepare Pms formula, long cycle</li> <li>▪ Prepare Pms formula, short cycle</li> <li>▪ Prepare Cervical dysplasia suppositories</li> <li>▪ Prepare Hpv (venereal wart) suppositories</li> <li>▪ Prepare Candida douche</li> <li>▪ Prepare Hayden's viburnum compound(modified)</li> </ul>	<p><u>Preparation of herbal medicine for Reproductive disorders</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of Candida formula</li> <li>❖ Preparation of Female balancer</li> <li>❖ Preparation of Menopause: early formula</li> <li>❖ Preparation of Menopause: later formula</li> <li>❖ Preparation of Pms formula, long cycle</li> <li>❖ Preparation of Pms formula, short cycle</li> <li>❖ Preparation of Cervical dysplasia suppositories</li> <li>❖ Preparation of Hpv (venereal wart) suppositories</li> <li>❖ Preparation of Candida douche</li> <li>❖ Preparation of Hayden's</li> </ul>	2	6	8

		viburnum compound(modified)			
6.	<u>Prepare herbal medicine for Urinary tract disorders</u> <ul style="list-style-type: none"> <li>▪ Prepare Urinary tincture (all purpose)</li> <li>▪ Prepare Alkalizing tea</li> </ul>	<u>Preparation of herbal medicine for Urinary tract disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Urinary tincture (all purpose)</li> <li>❖ Preparation of Alkalizing tea</li> </ul>	1	6	7
7.	<u>Prepare herbal medicine for Lymph/immune disorders</u> <ul style="list-style-type: none"> <li>▪ Prepare Lymph tonic</li> <li>▪ Prepare Immune stimulant #1</li> <li>▪ Prepare Immune stimulant #2</li> <li>▪ Prepare Lymph anti-effect (for mumps, mono, etc.)</li> <li>▪ Prepare Tonsilitis formula</li> <li>▪ Prepare Immune tonic</li> </ul>	<u>Preparation of herbal medicine for Lymph/immune disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Lymph tonic</li> <li>❖ Preparation of Immune stimulant #1</li> <li>❖ Preparation of Immune stimulant #2</li> <li>❖ Preparation of Lymph anti-effect (for mumps, mono, etc.)</li> <li>❖ Preparation of Tonsilitis formula</li> <li>❖ Preparation of Immune tonic</li> </ul>	1	6	7
8.	<u>Prepare herbal medicine for Cardio-vascular disorders</u> <ul style="list-style-type: none"> <li>▪ Prepare Greaseball hypertension</li> <li>▪ Prepare Hypotension formula (kidney deficient)</li> <li>▪ Prepare Tachycardia formula</li> <li>▪ Prepare Circulatory stimulant</li> <li>▪ Prepare Arteriosclerosis formula (health good, memory bad)</li> </ul>	<u>Preparation of herbal medicine for Cardio-vascular disorders</u> <ul style="list-style-type: none"> <li>❖ Preparation of Greaseball hypertension</li> <li>❖ Preparation of Hypotension formula (kidney deficient)</li> <li>❖ Preparation of Tachycardia formula</li> <li>❖ Preparation of Circulatory stimulant</li> <li>❖ Preparation of Arteriosclerosis formula (health good, memory bad)</li> </ul>	1	6	7
9.	<u>Prepare Topical herbal medicine</u> <ul style="list-style-type: none"> <li>▪ Prepare Podophyllin ointment</li> <li>▪ Prepare Chac salve</li> </ul>	<u>Preparation of Topical herbal medicine</u> <ul style="list-style-type: none"> <li>❖ Preparation of Podophyllin</li> </ul>	1	6	7

	<p>(calendula, hypericum, arnica, cajepu)</p> <ul style="list-style-type: none"> <li>▪ Prepare Muscle balm</li> <li>▪ Prepare "Trauma tincture"</li> <li>▪ Prepare Rotgut liniment</li> <li>▪ Prepare Echinacea salve</li> <li>▪ Prepare Golden seal salve</li> </ul>	<p>ointment</p> <ul style="list-style-type: none"> <li>❖ Preparation of Chac salve (calendula, hypericum, arnica, cajepu)</li> <li>❖ Preparation of Muscle balm</li> <li>❖ Preparation of "Trauma tincture"</li> <li>❖ Preparation of Rotgut liniment</li> <li>❖ Preparation of Echinacea salve</li> <li>❖ Preparation of Golden seal salve</li> </ul>			
10.	<p><u>Prepare herbal medicine for disorders of Central nervous system</u></p> <ul style="list-style-type: none"> <li>▪ Prepare Relaxing tea</li> <li>▪ Prepare Nerve tonic</li> <li>▪ Prepare Speed detox formula</li> <li>▪ Prepare V's nerve tonic</li> <li>▪ Prepare B's antidepressant</li> <li>▪ Prepare K's syrian rue formula</li> <li>▪ Prepare Compound tincture of cannabis (1910)</li> <li>▪ Prepare Post-treatment relaxer</li> <li>▪ Prepare Post-treatment strengthener</li> </ul>	<p><u>Preparation of herbal medicine for disorders of Central nervous system</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of Relaxing tea</li> <li>❖ Preparation of Nerve tonic</li> <li>❖ Preparation of Speed detox formula</li> <li>❖ Preparation of V's nerve tonic</li> <li>❖ Preparation of B's antidepressant</li> <li>❖ Preparation of K's syrian rue formula</li> <li>❖ Preparation of Compound tincture of cannabis (1910)</li> <li>❖ Preparation of Post-treatment relaxer</li> <li>❖ Preparation of Post-treatment strengthener</li> </ul>	1	6	7
11.	<p><u>Prepare herbal medicine for acute disease</u></p> <ul style="list-style-type: none"> <li>▪ Prepare Ego capsules</li> </ul>	<p><u>Preparation of herbal medicine for acute disease</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of Ego capsules</li> </ul>	1	6	7
12.	<p><u>Prepare herbal medicine for Chronic/metabolic disorders</u></p> <ul style="list-style-type: none"> <li>▪ Prepare Alterative syrup</li> <li>▪ Prepare Detox formula</li> </ul>	<p><u>Preparation of herbal medicine for Chronic/metabolic disorders</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of Alterative syrup</li> <li>❖ Preparation of Detox</li> </ul>	1	6	7

		formula			
13.	<u>Prepare herbal medicine for pleasure or fun</u> <ul style="list-style-type: none"> <li>▪ Prepare Five mint tea</li> <li>▪ Prepare Root tea</li> <li>▪ Prepare Flower tea</li> <li>▪ Prepare Mesomarbles</li> <li>▪ Prepare Guarana fudge (aka speed fudge)</li> </ul>	<u>Preparation of herbal medicine for pleasure or fun</u> <ul style="list-style-type: none"> <li>❖ Preparation of Five mint tea</li> <li>❖ Preparation of Root tea</li> <li>❖ Preparation of Flower tea</li> <li>❖ Preparation of Mesomarbles</li> <li>❖ Preparation of Guarana fudge (aka speed fudge)</li> </ul>	1	6	7
		Total:	14	78	92
<b>Module: 7: Marketing herb &amp; herbal products</b>					
<b>Description:</b> It deals with the knowledge and skills related to the marketing of herb & herbal products.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To enlist marketable herb/herbal products</li> <li>• To make herb/herbal products ready to market</li> <li>• To price the herb/herbal products</li> <li>• To market herb/herbal products</li> <li>• To promote herb/herbal products</li> <li>• To sell herb/herbal products</li> <li>• To calculate profit/loss</li> <li>• To prepare reinvestment plan</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
Th.( 8 hrs) + Pr.(16 hrs) = Tot.( 24 hrs)			Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	<u>Enlist marketable herb/herbal products</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Identify marketable herb/herbal products</li> <li>• Identify uses of marketable herb/herbal products</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Enlisting marketable herb/herbal products</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Marketable herb/herbal products-listing and identification and uses</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
2.	<u>Make herb/herbal products ready to market</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Identify marketable herb/herbal products</li> </ul>	<u>Making herb/herbal products ready to market</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> </ul>	1	2	3

	<ul style="list-style-type: none"> <li>• Make herb/herbal products ready to market</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<ul style="list-style-type: none"> <li>❖ Identification of marketable herb/herbal products</li> <li>❖ Making herb/herbal products ready to market</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>			
3.	<u>Price the herb/herbal products</u> <u>Receive instruction</u> <ul style="list-style-type: none"> <li>• Calculate cost</li> <li>• Collect current market price</li> <li>• Determine profit margin</li> <li>• Fix price of the herb/herbal products</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Pricing the herb/herbal products</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Calculating cost</li> <li>❖ Collecting current market price</li> <li>❖ Determining profit margin</li> <li>❖ Fixing price of the herb/herbal products</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
4.	<u>Market herb/herbal products</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Select market place for selling herb/herbal products</li> <li>• Market herb/herbal products</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Marketing herb/herbal products</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Selecting market place for selling herb/herbal products</li> <li>❖ Marketing herb/herbal products</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
5.	<u>Promote herb/herbal products</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Publicity herb/herbal products</li> <li>• Advertise herb/herbal products</li> <li>• Carry out personal selling of herb/herbal products</li> <li>• Carry sales promotion of herb/herbal products</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Promoting herb/herbal products</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Publicity of herb/herbal products</li> <li>❖ Advertisement of herb/herbal products</li> <li>❖ Personal selling of herb/herbal products</li> <li>❖ Sales promotion of herb/herbal products</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3

6.	<u>Sell herb/herbal products</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Place the products to sell</li> <li>• Receive buyers</li> <li>• Show good mannerism</li> <li>• Describe uses of the products</li> <li>• Sell the products</li> <li>• Bill the products</li> <li>• Receive payments</li> <li>• Farewell the buyers</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Selling herb/herbal products</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Placing the products to sell</li> <li>❖ Receiving buyers</li> <li>❖ Showing good mannerism</li> <li>❖ Describing uses of the products</li> <li>❖ Selling the products</li> <li>❖ Billing the products</li> <li>❖ Receiving payments</li> <li>❖ Fare welling the buyers</li> <li>❖ Taking precautions</li> <li>❖ Keeping records</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
7.	<u>Calculate profit/loss</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Calculate costs</li> <li>• Calculate returns</li> <li>• Calculate profits/loss</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Calculating profit/loss</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Calculating costs</li> <li>❖ Calculating returns</li> <li>❖ Calculating profits/loss</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
8.	<u>Prepare reinvestment plan</u> <ul style="list-style-type: none"> <li>• Receive instruction</li> <li>• Obtain a sample reinvestment plan</li> <li>• Study the reinvestment plan</li> <li>• Identify components of the reinvestment plan</li> <li>• Prepare a reinvestment plan</li> <li>• Take precautions</li> <li>• Keep records</li> </ul>	<u>Preparing reinvestment plan</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Components of the reinvestment plan</li> <li>❖ Preparation of a reinvestment plan</li> <li>❖ Precautions to be taken</li> <li>❖ Records keeping</li> </ul>	1	2	3
		Total:	8	16	24
		Specialized modules total:	101	289	390

<b>Module :8 : Common module</b>					
<b>Description:</b> This module consists of skills and knowledge related to applied math, occupational health and safety, HIV/AIDS, first aid, communication, and small business management applicable in the related job performances.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To carry out simple mathematical calculations related to the occupation</li> <li>• To be familiar with hazards related to this occupation</li> <li>• To apply preventive measures for occupational health and safety</li> <li>• To apply first aid measures</li> <li>• To apply preventive measures for HIV/AIDS</li> <li>• To communicate with others</li> <li>• To apply skills of small business management</li> </ul>					
Sub modules: <ol style="list-style-type: none"> <li>1. Applied math</li> <li>2. Occupational health and safety</li> <li>3. First aid</li> <li>4. HIV/AIDS</li> <li>5. Communication</li> <li>6. Small business management</li> </ol>					
<b>Sub module: 1:Applied math</b>					
<b>Description:</b> It consists of skills and knowledge related to mathematical calculations applicable in the related occupational performances.					
<b>Objective:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To carry out simple mathematical calculations that must be done for the effective performance in the occupational job.</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
			Th.(4 hrs) + Pr.( 16hrs) = Tot.( 20 hrs)		
			Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	Carry out simple addition applicable in job situation	<u>Addition:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Simple calculations</li> <li>❖ Application in the occupation</li> </ul>	0.2	0.8	1
2.	Carry out simple subtraction applicable in job situation	<u>Subtraction:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Simple calculations</li> <li>❖ Application in the occupation</li> </ul>	0.2	0.8	1
3.	Carry out simple multiplication applicable in job situation	<u>Multiplication</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Simple calculations</li> <li>❖ Application in the occupation</li> </ul>	0.2	0.8	1

4.	Carry out simple division applicable in job situation	<u>Division:</u> ❖ Concept ❖ Simple calculations ❖ Application in the occupation	0.2	0.8	1
5.	Carry out measurements	<u>Measurement:</u> ❖ Concept ❖ Application in the occupation	0.2	0.8	1
6.	Convert units of measurement	<u>Units of measurement:</u> ❖ Concept ❖ Units of measurement ❖ Unit conversion ❖ application	0.2	0.8	1
7.	Convert units of measuring temperature	<u>Units of measuring temperature:</u> ❖ Concept ❖ Units of temperature measurement ❖ Unit conversion ❖ application	0.2	0.8	1
8.	Calculate area	<u>Area:</u> ❖ Concept ❖ Formula ❖ Calculation ❖ Application	0.2	0.8	1
9.	Calculate volume	<u>Volume:</u> ❖ Concept ❖ Formula ❖ Calculation ❖ Application	0.2	0.8	1
10.	Calculate weight	<u>Weight:</u> ❖ Concept ❖ Formula ❖ Calculation ❖ Application	0.2	0.8	1
11.	Calculate percentage	<u>Percentage:</u> ❖ Concept ❖ Formula ❖ Calculation ❖ Application	0.2	0.8	1
12.	Calculate ratio and proportions	<u>Ratio and proportions:</u> ❖ Concept ❖ Formula ❖ Calculation ❖ Application	0.2	0.8	1
13.	Apply Pythagoras formula	<u>Pythagoras formula:</u>	0.2	0.8	1

		<ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Formula</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>			
14.	Apply unitary method	<u>Unitary method:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>	0.2	0.8	1
15.	Calculate simple interest	<u>Simple interest:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Formula</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>	0.2	0.8	1
16.	Calculate unit cost	<u>Unit cost:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Formula</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>	0.2	0.8	1
17.	Calculate per unit income	<u>Per unit income:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Formula</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>	0.2	0.8	1
18.	Calculate profit and loss	<u>Profit and loss:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Formula</li> <li>❖ Calculation</li> <li>❖ Application</li> </ul>	0.2	0.8	1
19.	Perform billing	<u>Billing:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Calculation</li> <li>❖ Bill format</li> <li>❖ Procedure</li> <li>❖ Application</li> </ul>	0.2	0.8	1
20.	Prepare simple balance sheet	<u>Balance sheet:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Format</li> <li>❖ Procedure</li> <li>❖ Application</li> </ul>	0.2	0.8	1
	<b>Total:</b>		<b>4</b>	<b>16</b>	<b>20</b>
<b>Sub module: 2: Occupational health and safety</b>					
<b>Description:</b> It consists of skills and knowledge related to occupational health and safety applicable in the related occupational performances					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To be familiar with hazards related to this occupation</li> <li>• To apply preventive measures for occupational health and safety</li> </ul>					

		<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
		Th.(2 hrs) + Pr.( 8hrs) = Tot.( 10 hrs)			Time( hrs )	
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.	
<b>Be familiar with hazards related to this occupation</b>						
1.	Be familiar with accident hazards	<u>Accident hazards:</u> ❖ Concept ❖ Causes ❖ Procedures for managing this hazard	0.2	0.8	1	
2.	Be familiar with physical hazards	<u>Physical hazards:</u> ❖ Concept ❖ Causes ❖ Procedures for managing this hazard	0.2	0.8	1	
3.	Be familiar with chemical hazards	<u>Chemical hazards:</u> ❖ Concept ❖ Causes ❖ Procedures for managing this hazard	0.2	0.8	1	
4.	Be familiar with biological hazards	<u>Biological hazards:</u> ❖ Concept ❖ Causes ❖ Procedures for managing this hazard	0.2	0.8	1	
5.	Be familiar with ergonomic/psychological / organizational factors:	<u>Ergonomic /psychological / organizational factors:</u> ❖ Concept of : ▪ Ergonomic factors ▪ Psychological factors ▪ organizational factors ❖ Procedures for managing hazards caused by these factors	0.2	0.8	1	
		Sub total:	<b>1</b>	<b>4</b>	<b>4</b>	
<b>Apply preventive measures for occupational health and safety</b>						
1.	Wear safety wares	<u>Safety wares:</u> ❖ Identification ❖ Needs ❖ Wearing procedures	0.2	0.5	0.7	
2.	Inspect workplace before working	<u>Workplace inspection:</u> ❖ Concept ❖ Principle and procedures ❖ Records keeping	0.2	0.5	0.7	

3.	Inspect tools/materials/equipment before use	<u>Inspection of tools/materials/equipment:</u> ❖ Concept and identification ❖ Principle and procedures ❖ Records keeping	0.1	0.5	0.6
4.	Be prevented from accident hazards	<u>Prevention of accident hazards:</u> ❖ Concept ❖ Being prevented from accident hazards ❖ Records keeping	0.1	0.5	0.6
5.	Be prevented from physical hazards	<u>Prevention of physical hazards:</u> ❖ Concept ❖ Being prevented from physical hazards ❖ Records keeping	0.1	0.5	0.6
6.	Be prevented from chemical hazards	<u>Prevention of chemical hazards:</u> ❖ Concept ❖ Being prevented from chemical hazards ❖ Records keeping	0.1	0.5	0.6
7.	Be prevented from biological hazards	<u>Prevention of biological hazards:</u> ❖ Concept ❖ Being prevented from biological hazards ❖ Records keeping	0.1	0.5	0.6
8.	Be prevented from ergonomic/psychological / organizational factors that create problems/hazards.	<u>Prevention of ergonomic/psychological / organizational factors that create problems/hazards:</u> ❖ Concept ❖ Being prevented from ergonomic/psychological / organizational factors that create problems/hazards ❖ Records keeping	0.1	0.5	0.6
	Sub total:		1	4	5
	Total:		2	8	10
<b>Sub module: 3: First aid</b>					
	<b>Description:</b> It consists of skills and knowledge related to first aid measures applicable in the related occupational performances.				
	<b>Objective:</b> After its completion the trainees will be able: • To apply first aid measures				
	<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
	Th.(1 hrs) + Pr.( 4hrs) = Tot.( 5 hrs)		Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.

1.	Carryout simple dressings	<u>Carryout simple dressings:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
2.	Apply simple bandages	<u>Apply simple bandages:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
3.	Apply first aid for simple wounds	<u>Apply first aid for simple wounds:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
4.	Apply first aid for heat /chemical burns	<u>Apply first aid for heat /chemical burns:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
5.	Apply first aid for injuries/cuts	<u>Apply first aid for injuries/cuts:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
6.	Apply first aid for fracture	<u>Apply first aid for fracture:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
7.	Apply first aid for simple bleeding	<u>Apply first aid for simple bleeding:</u> ❖ Concept ❖ Needs ❖ Procedures ❖ Precautions ❖ Recording	0.10	0.40	0.5
8.	Apply first aid for insect bites	<u>Apply first aid for insect bites:</u>	0.05	0.20	0.25

		<ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>			
9.	Apply first aid for animal bites	<u>Apply first aid for animal bites:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>	0.05	0.20	0.25
10.	Apply first aid for frost bite	<u>Apply first aid for frost bite :</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>	0.05	0.20	0.25
11.	Apply first aid for simple poisoning	<u>Apply first aid for simple poisoning:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>	0.05	0.20	0.25
12.	Apply first aid for electrical shock	<u>Apply first aid for electrical shock:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>	0.05	0.20	0.25
13.	Apply first aid for choking/ drowning	<u>Apply first aid for choking/ drowning:</u> <ul style="list-style-type: none"> <li>❖ Concept</li> <li>❖ Needs</li> <li>❖ Procedures</li> <li>❖ Precautions</li> <li>❖ Recording</li> </ul>	0.05	0.20	0.25
<b>Total:</b>			<b>1</b>	<b>4</b>	<b>5</b>
<b>Sub module: 4: HIV/AIDS</b>					
<b>Description:</b> It consists of skills and knowledge related to safety measures to be followed for the prevention of HIV/AIDS including its management.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To state the concept of HIV/AIDS</li> <li>• To apply safety measures for prevention of HIV/AIDS</li> </ul>					

		<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:				
		Th.(1 hrs) + Pr.( 4hrs) = Tot.( 5 hrs)		Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.	
1.	<b>State the concept of HIV/AIDS</b> 1. Define HIV 2. Enlist modes of transmission of HIV 3. Enlist signs and symptoms of HIV infected person 4. Enlist stages of HIV 5. Define AIDS 6. Enlist signs and symptoms of AIDS 7. Enlist current status of global HIV/AIDS 8. Enlist difference between HIV/AIDS	<b>State the concept of HIV/AIDS:</b> <b>HIV:</b> ❖ Definition of HIV: ❖ Modes of transmission of HIV ❖ Signs and symptoms of HIV infected person ❖ Stages of HIV <b>AIDS:</b> ❖ Definition of AIDS ❖ Signs and symptoms of AIDS ❖ Current status of global HIV/AIDS ❖ Difference between HIV and AIDS	0.5	2	2.5	
2.	<b>Apply safety measures for prevention of HIV/AIDS:</b> 1. Keep touch with single partner for sexual intercourse 2. Ensure safe intercourse 3. Use condom carefully and consistently during each act of sexual intercourse incase of other than single sex partner 4. Keep away from sharing syringes, needles and other skin piercing instrument with HIV infected people 5. Keep away from sharing toothbrushes, blade razors or other instruments that could become contaminated from blood 6. Keep away from handling clothes or cloths that are visibly contaminated with blood 7. Follow positive health behavior 8. Get blood be tested to ensure	<b>Apply safety measures for prevention of HIV/AIDS:</b> ❖ Keeping touch with single partner for sexual intercourse ❖ Ensuring safe intercourse ❖ Using condom carefully and consistently during each act of sexual intercourse incase of other than single sex partner ❖ Keeping away from sharing syringes, needles and other skin piercing instrument with HIV infected people ❖ Keeping away from sharing toothbrushes, blade razors or other instruments that could become contaminated from blood ❖ Keeping away from handling clothes or cloths that are visibly contaminated with blood ❖ Positive health behavior	0.5	2	2.5	

	HIV negative/positive	❖ Getting blood be tested to ensure HIV negative/positive			
	<b>Total:</b>		1	4	5
<b>Sub module: 5 : Communication</b>					
<b>Description:</b> It consists of the skills and knowledge related to communication in the related occupation. Each task consists of its steps, related technical knowledge and hour distribution.					
<b>Objectives:</b> After its completion the trainees will be able:					
	<ul style="list-style-type: none"> <li>• To handle telephone calls</li> <li>• To handle fax</li> <li>• To handle mail</li> <li>• To write letters</li> <li>• To write memos / tips / notes / notice</li> <li>• To perform internal communication</li> <li>• To perform external communication</li> <li>• To perform oral communication</li> <li>• To perform written communication</li> </ul>	<ul style="list-style-type: none"> <li>• To communicate with donors To communicate with financial institutes</li> <li>• To link with media</li> <li>• To disseminate information</li> <li>• Write job application</li> <li>• Prepare Resume.</li> <li>• Communicate with senior.</li> <li>• Communicate with juniors.</li> <li>• Deal with customers</li> <li>• Request / purchase tool, supplies, materials and equipment.</li> <li>• Fill up leave requisition form.</li> </ul>			
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
			Th.(2 hrs) + Pr.( 8hrs) = Tot.( 10 hrs)		Time( hrs )
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
1.	Handle telephone calls	<u>Handling telephone calls:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Operating principles and procedures</li> <li>❖ Care and maintenance</li> <li>❖ Safety precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
2.	Handle fax	<u>Handling fax:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Operating principles and procedures</li> <li>❖ Care and maintenance</li> <li>❖ Safety precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
3.	Handle mail	<u>Handling mail:</u>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Operating principles and procedures</li> <li>❖ Care and maintenance</li> <li>❖ Safety precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>			
4.	Write letters	<u>Writing letters:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Types of letter</li> <li>❖ Component parts of each type of letter</li> <li>❖ Format of each type of letter</li> <li>❖ Writing letters</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
5.	Write memos / tips / notes / notice	<u>Writing memos / tips / notes / notice :</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts of memos / tips / notes / notice</li> <li>❖ Format of memos / tips / notes / notice</li> <li>❖ Writing memos / tips / notes / notice</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
6.	Prepare simple report	<u>Preparing simple report:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts of a report</li> <li>❖ Format of a report</li> <li>❖ Writing a report</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
7.	Prepare simple proposal	<u>Preparing simple proposal:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts of a proposal</li> <li>❖ Format of a proposal</li> <li>❖ Writing a proposal</li> <li>❖ Precautions to be taken</li> </ul>	0.1	0.4	0.5

		❖ Keeping activity records			
<b>8.</b>	Perform internal/ external communication	<u>Performing internal/ external communication:</u> ❖ Concept, need, and importance ❖ Principles, procedures, and application ❖ Performing internal/ external communication ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
<b>9.</b>	Perform horizontal/vertical communication	<u>Performing horizontal/vertical communication:</u> ❖ Concept, need, and importance ❖ Principles, procedures, and application ❖ Performing horizontal/vertical communication ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
<b>10.</b>	Perform oral/ written communication	<u>Performing oral/ written communication:</u> ❖ Concept, need, and importance ❖ Principles, procedures, and application ❖ Performing oral/ written communication ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
<b>11.</b>	Communicate with financial institutes	<u>Communicating with financial institutes:</u> ❖ Concept, need, and importance ❖ Principles, procedures, and application ❖ Communicating with financial institutes ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
<b>12.</b>	Link with media	<u>Linking with media:</u> ❖ Concept, need, and importance ❖ Principles, procedures, and	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>application</li> <li>❖ Linking with media</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>			
13.	Disseminate information	<u>Disseminating information:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Disseminating information</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
14.	Write job application	<u>Writing job application:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts of job application</li> <li>❖ Format of job application</li> <li>❖ Writing job applications</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
15.	Prepare resume	<u>Preparing resume:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts of a resume</li> <li>❖ Format of a resume</li> <li>❖ Writing resume</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
16.	Communicate with senior.	<u>Communicating with senior:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Communicating with senior</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
17.	Communicate with juniors.	<u>Communicating with juniors:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
18.	Deal with customers/stake holders	<u>Dealing with customers/stake holders:</u>	0.1	0.4	0.5

		<ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Communicating with juniors</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>			
19.	Request / purchase tool, supplies, materials and equipment.	<u>Requesting / purchasing tool, supplies, materials and equipment:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Requesting / purchasing tool, supplies, materials and equipment</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
20.	Fill up leave requisition form	<u>Filling up leave requisition form:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles, procedures, and application</li> <li>❖ Filling up leave requisition form</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping activity records</li> </ul>	0.1	0.4	0.5
		<b>Total:</b>	<b>2</b>	<b>8</b>	<b>10</b>
<b>Sub module: 6 : Small enterprise development</b>					
<b>Description:</b> It consists of the skills and knowledge related to small enterprise development in the related occupation. Each task consists of its steps, related technical knowledge and hour distribution.					
<b>Objectives:</b> After its completion the trainees will be able: <ul style="list-style-type: none"> <li>• To be familiar with entrepreneurship development</li> <li>• To prepare a business plan</li> </ul>					
<b>Tasks:</b> To fulfill the objective the trainees are expected to get proficiency on the following tasks/skills/steps together with their related technical knowledge:					
Th.(4 hrs) + Pr.( 16 hrs) = Tot.( 20 hrs)			Time( hrs )		
SN	Tasks or skills/ steps	Related technical knowledge	Th.	Pr.	Tot.
	<b><u>Entrepreneurship development:</u></b>	<b><u>Entrepreneurship development:</u></b>			
1.	Be familiar with business / entrepreneurship	<u>Business / entrepreneurship:</u> <ul style="list-style-type: none"> <li>❖ Concept, definitions, need, and importance</li> <li>❖ Precautions to be taken</li> </ul>	0.1	0.4	0.5

		❖ Keeping activity records			
2.	Develop qualities of a successful entrepreneur	<u>Qualities of a successful entrepreneur:</u> ❖ Concept and needs ❖ Qualities of a successful entrepreneur ❖ Keeping activity records	0.1	0.4	0.5
3.	Follow professional ethics	<u>Professional ethics:</u> ❖ Concept, need, and importance ❖ Professional ethics ❖ Interpretation ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
4.	Analyze prevailing rules / regulations/ laws /acts related to the profession	<u>Prevailing rules / regulations/ laws /acts related to the profession:</u> ❖ Concept, need, and importance ❖ Prevailing rules / regulations/ laws /acts related to the profession ❖ Interpretation ❖ Precautions to be taken ❖ Keeping activity records	0.1	0.4	0.5
5.	Develop skills of good governance	<u>Good governance:</u> ❖ Concept, need, and importance ❖ Principles and procedures of good governance ❖ Precautions to be taken ❖ Keeping activity re	0.1	0.4	0.5
6.	Be familiar with entrepreneurship development/ factors affecting the growth of entrepreneurship	<u>Entrepreneurship development/ factors affecting the growth of entrepreneurship:</u> ❖ Concept, need, and importance ❖ Entrepreneurship development ❖ Factors affecting the growth of entrepreneurship ❖ Precautions to be taken ❖ Keeping records	0.1	0.4	0.5
7.	Develop an entrepreneurship competency development [ECD] program	<u>Entrepreneurship competency development [ECD] program:</u> ❖ Concept, need, and	0.1	0.4	0.5

		<p>importance</p> <ul style="list-style-type: none"> <li>❖ Entrepreneurship competency development [ECD]</li> <li>❖ ECD program development</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>			
8.	<p>Be familiar with identification / selection/appraising/gaining instructional a support of a project</p> <ul style="list-style-type: none"> <li>• Be familiar with identification of a project</li> <li>• Be familiar with selection of a project</li> <li>• Be familiar with appraising of a project</li> <li>• Be familiar with gaining instructional a support of a project</li> </ul>	<p><u>Identification / selection/appraising/gaining instructional a support of a project:</u></p> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Identification of a project</li> <li>❖ Selection of a project</li> <li>❖ Appraising of a project</li> <li>❖ Gaining instructional a support of a project</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.1	0.4	0.5
9.	<p>Be familiar with the preparation of a comprehensive business plan for starting / acquiring /running a business</p>	<p><u>Be familiar with the preparation of a comprehensive business plan for starting / acquiring /running a business:</u></p> <ul style="list-style-type: none"> <li>❖ Preparation of a comprehensive business plan for starting a business</li> <li>❖ Preparation of a comprehensive business plan for acquiring a business</li> <li>❖ Preparation of a comprehensive business plan for running a business</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.1	0.4	0.5
10.	<p>Be familiar with marketing of products</p>	<p><u>Be familiar with marketing of products:</u></p> <ul style="list-style-type: none"> <li>❖ concept of product, price, place, promotion</li> <li>❖ marketing of products</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.1	0.4	0.5
		Sub total:	<b>1</b>	<b>4</b>	<b>5</b>
	<b><u>Business plan:</u></b>	<b><u>Business plan:</u></b>			
11.	<p>Collect related information / data</p>	<p><u>Collecting related information / data:</u></p>	0.4	1.6	2

		<ul style="list-style-type: none"> <li>❖ Concept, need, and importance of data and information</li> <li>❖ Difference between data and information</li> <li>❖ Principles and procedures for collecting related information / data</li> <li>❖ Collecting related information / data</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>			
<b>12.</b>	Prepare production plan	<u>Preparing production plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts</li> <li>❖ Format</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.4	1.6	2
<b>13.</b>	Prepare cost plan	<u>Preparing cost plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts</li> <li>❖ Format</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.4	1.6	2
<b>14.</b>	Prepare financial plan	<u>Preparing financial plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts</li> <li>❖ Format</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.4	1.6	2
<b>15.</b>	Prepare marketing plan	<u>Preparing marketing plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Component parts</li> <li>❖ Format</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.4	1.6	2
<b>16.</b>	Prepare a business plan	<u>Preparing a business plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and</li> </ul>	0.6	2.4	3

		<ul style="list-style-type: none"> <li>importance</li> <li>❖ Component parts</li> <li>❖ Format</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>			
17.	Appraise business plan	<u>Appraising business plan:</u> <ul style="list-style-type: none"> <li>❖ Concept, need, and importance</li> <li>❖ Principles and procedures</li> <li>❖ Precautions to be taken</li> <li>❖ Keeping records</li> </ul>	0.4	1.6	2
		Sub total:	3	12	15
		Total:	4	16	20
		Common module total:	14	56	70
		<b>All total:</b>	<b>115</b>	<b>345</b>	<b>460</b>
<b>List of tools, materials and equipment</b>					
	<u>Instructor selected tools, materials and equipment for:</u> <ul style="list-style-type: none"> <li>• Introduction to herbs</li> <li>• Collecting, drying, &amp; storing of crude drugs</li> <li>• Preventing adulteration of crude drugs</li> <li>• Evaluating of crude drugs</li> <li>• Obtaining drugs from a plant</li> <li>• Preparing of herbal products</li> <li>• Marketing herb/herbal products</li> <li>• Occupational health and safety</li> <li>• First aid/ HIV/AIDS</li> <li>• Communication</li> <li>• Small business management</li> </ul>	<u>Tools/materials/equipment selection procedure:</u> <ul style="list-style-type: none"> <li>• Obtain curriculum</li> <li>• Study the curriculum</li> <li>• Make list of tasks/skills</li> <li>• Sequence and analyze the related tasks</li> <li>• Make list of necessary tools, materials and equipment necessary for carrying out each of the task/skill</li> <li>• select the necessary tools, materials and equipment necessary for carrying out the task/skill specified in the curriculum</li> <li>• Give priority to select locally available tools, materials and equipment as far as possible</li> <li>• Make comprehensive list of necessary tools, materials and equipment</li> </ul>			
<b>Reading materials</b>					
	<ul style="list-style-type: none"> <li>• Quality control measures in herb manufacturing (Crude herb processing) -by Subhuti Dharmananda, Ph.D., Director, Institute for Traditional Medicine, Portland, Oregon</li> <li>• Processing Chinese herbs</li> </ul>	<ul style="list-style-type: none"> <li>• Processing Herbs and Herbal Medicines, Production processes for herbals and botanicals - U. S. Food and Drug Administration Center for Food Safety and Applied Nutrition</li> <li>• How clean and pure are Chinese herbs? - by Subhuti Dharmananda, Ph.D.,</li> </ul>			

	<p>(Basic principles and its therapeutic importance) - Dr. Michael Tierra L.Ac., O.M.D.</p> <ul style="list-style-type: none"> <li>• Basic principles in herb processing [from Herb Processing Facility 2002, Richard Alan Miller, c2002. For the complete book, a PDF download is available from <a href="http://www.herbfarminfo.com">www.herbfarminfo.com</a>] -by Richard Alan Miller</li> </ul>	<p>Director, Institute for Traditional Medicine, Portland, Oregon</p> <ul style="list-style-type: none"> <li>• Herb formulas for clinic and home - by Michael Moore</li> <li>• Materia Medica that defines the herbs, formats, and preparations</li> <li>• Culinary herbs - by Kim Fletcher and Shirley Fraser</li> <li>• Instructor selected textbooks/ reference books / manuals/ journals and articles available in the marker</li> <li>• Instructor prepared books, handouts, notes and manuals</li> </ul>	
<b>Facilities</b>			
	<ul style="list-style-type: none"> <li>• Well equipped enough class/ office rooms</li> <li>• A / V room</li> <li>• Demonstration herb garden</li> <li>• Land for herb cultivation</li> <li>• Well equipped herb processing workshop/lab.</li> </ul>	<ul style="list-style-type: none"> <li>• Transportation facilities/ Vehicle/Library</li> <li>• OHP/computers with CD ROM attachment / pictures</li> <li>• Multimedia presentation set /slide presenter</li> <li>• Hostel/canteen /drinking water/ electricity</li> </ul>	