**NATIONAL COUNCIL FOR TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING**

**FEBRUARY 2023**

# PROPOSED OCCUPATIONAL STANDARDS

# OCCUPATION: TEA PRODUCTION AND PROCESSING TECHNICIAN

## LEVEL: NTA 6

**TABLE OF CONTENT**

# CONTENTS

**ABBREVIATIONS**

| | |
|---|---|
| **B.O.P** | Broken Orange Pekoe |
| **B.P** | Broken Pekoe |
| **CTC** | Crush, Tear, Curl (A method of processing broken black tea with a tea leaf cutter) |
| **F.B.O.P** | Flowery Broken Orange Pekoe |
| **F.O.P** | Flowery Orange Pekoe |
| **LTP** | Laurie Tea Processer |
| **NACTVET** | National Council for Technical and Vocational Education and Training |
| **NOS** | National Occupational Standards |
| **O.P** | Orange Pekoe |
| **OS** | Occupational Standards |
| **TET** | Technical Education and Training |
| **TVET** | Technical and Vocational Education and Training |

## GLOSSARY OF TERMS

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| **Circumstantial Knowledge:** | Detailed knowledge, which allows the decision-making in regard to different circumstances and cross cutting issues. |
| **Competence:** | The competence to use knowledge, understanding, practical, and thinking skills to perform effectively to the workplace standards required in employment. |
| **Competency:** | A description of the ability one possesses when able to perform a given occupational task effectively and efficiently. |
| **Competency-based Education:** | An instructional programme that derives its content from validated tasks and bases assessment on the learner's performance. |
| **Curriculum:** | A description or composite of statements about "what is to be learned" by the trainee/student in a particular instructional programme; a product that states the "intended learning outcomes". |
| **Educational/Training Programme:** | The complete curriculum and instruction (what and how) that is designed to prepare a person for employment in a job or other particular performance situation. |
| **Occupation:** | A specific position requiring the performance of specific tasks - essentially the same tasks are performed by all employees having the same title. (Example: baker) |
| **Occupational Area:** | This is a broad grouping of related jobs. (Example: catering service). |
| **Occupational Standards:** | Specific requirements of competences for personnel in a particular occupational area, including knowledge and relevant attitudes. They also act as performance tools of assessment of the prescribed outcomes. |
| **Occupational/Job Analysis:** | A process used to identify the tasks that are important to employees in any given occupation. |
| **Performance Criteria:** | Indicate expected end results or outcomes in the form of evaluative statements. |
| **Skills:** | The ability to perform occupational tasks with a high degree of proficiency within a given occupation. Skill is conceived of as a composite of three completely interdependent components: cognitive, affective, and psychomotor. |
| **Standards:** | A set of statements, which, if proved true under working conditions, means that an individual is meeting an expected level and type of performance. |

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| **Task Analysis:** | The process of analysing each task to determine the steps, circumstantial knowledge, attitudes, performance criteria, tools and materials needed, as well as safety concerns required for the employees performing it. |
| **Task:** | A work activity that has a definite beginning and ending, is observable or measurable, consists of two or more definite steps, and leads to products, service, or decisions. |
| **Underpinning Knowledge:** | Crucial knowledge that an individual must acquire in order to demonstrate competences that are associated in performing a given task. |
| **Verification Process:** | The process of having experts review and confirm the importance of the task (competency) statements identified through occupational analysis. Other questions, such as the degree of task learning difficulty are also frequently asked. This process is also sometimes referred to as validation. |
| **Occupational Competence:** | The application of knowledge and skills that consistently meet the standards required by the working conditions. |

## 1.0. INTRODUCTION

Technical Education and Training (TET) is one of the most important education sub-sectors in Tanzania, responsible for developing a skilled workforce to support the country's industrialization economic agenda. *Tanzania's Development Vision 2025* intends to raise the country's economy to a middle-income status. This requires a skilled workforce that is aligned with the needs of the public and private sectors of the economy. The National Council for Technical Education has begun the job of drafting Occupational Standards that will eventually be adopted as National Occupational Standards for TET in order to ensure that it meets the needs of the labour market and the country's economic agenda.

National Occupational Standards (NOS) are performance criteria that are matched with labour market demands. Each National Occupation Standard describes functions, performance standards, and knowledge/understanding for one important function or task. They combine skills, knowledge, and attitudes to describe best practice. They are useful tools for establishing job roles, personnel recruiting, supervision, and appraisal, as well as TET standards. They're also helpful for benchmarking and harmonizing qualifications on a national and international level. Standards, in general, provide a solid framework for high-quality TET that is labour market-relevant, current, and consistent in delivery across all public and private institutions.

However, it must be noted that, Occupational Standards and Training standards/qualifications standards are different. Occupational standards are defined in terms of activities performed by a person in a selected occupation (e.g., an electrical engineer designs electrical circuits, performs troubleshooting in electrical circuits, etc.) and they are usually defined by employers following procedures agreed upon by all stakeholders. Education and training standards are developed from the activities defined in occupational standards, and they include learning objectives to ensure that the necessary skills and knowledge are developed by a person to enable him or her to function at an agreed level in an occupation. Education and Training standards are used to define curricula in training institutions. It is however critical that there must be a direct link between the occupational standards and the training standards to respond to the demands of the labour market.

In TET delivery, Tanzania adopted the Competence Based Education and Training (CBET) approach. The CBET approach focuses on providing learners with the skills and knowledge required to meet the occupational standards. Occupational standards are thus the starting point for developing competency-based training (CBET) programmes. TET institutions will be required to benchmark their curricula with relevant occupational standards.

Occupational Standards are developed based on a given occupation's current and future demands. As a result, they serve as a means of bridging the gap between the worlds of employment and technical education and training (TET).

Tea Production and Processing Technician has its own set of occupational standards. The document explains how the occupational standards were developed, as well as the scope, the occupational profile in the form of DACUM charts, and the Occupational Standards.

## 2.0. OCCUPATIONAL STANDARD DEVELOPMENT PROCESS

The Occupational standard development process began with an examination of major documents that guide Tanzanian skill development. The *10-year National Skills Development Strategy (2016-2026)* was one of the documents reviewed, and it outlined six (6) economic sectors that should be prioritized when developing skills development programmes.

These sectors include: Transport and Logistics, Tourism and Hospitality, Agribusiness, Construction, Energy and ICT. NACTE labour market reports were also used in the literature review to determine the skills demand in the Tanzanian labour market as a whole.

After the literature review, a workshop comprised of expert workers and educators with substantial knowledge and experience in the occupation conducted an occupational analysis utilizing the DACUM approach to produce the occupational profile. The analysis resulted in DACUM Charts, which are attached as **Appendix 1** to this document.

The occupational standards were then developed. Experts in Occupational Analysis and the Development of Occupational Standards facilitated the workshop. Interviews, online surveys, and a stakeholder forum were used to validate the Occupational Standards. Tea Processors, Tea Evaluators, Tea Art Specialists, and other personnel were key informants in the survey to discover occupational trends. This information was used to gain insight from the workplaces regarding trends and changes in the profession, including how well graduates are prepared for working in the occupation. A total of ... online surveys were completed by experts from the labour market across the country. Apart from the surveys aiding in defining the scope for the occupational analysis, they also served to engage a wide cross-section of experts in the occupation. Apart from this, the stakeholders' forum was attended by ... participants from different parts of the country representing various companies.

## 3.0. THE SCOPE AND OVERVIEW OF THE OCCUPATION STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIANS

These standards cover a broad range of duties and tasks that can be performed by a Tea Production and Processing Technician. However, the occupational standards are not meant to replace individual

job descriptions. Instead, they are to be used for guidance in defining skill levels and knowledge for the technician in specific settings or positions. The Tea Production and Processing Technician may perform tasks in a number of key areas of the Occupational Standards, but not necessarily in all areas. For example, in the process of tea processing technology control, other individuals may be employed or designated to perform specific tasks.

Tea Production and Processing Technicians should be engaged in tea garden production and management, as well as processing fresh tea leaves into preliminary tea products and refined products.

Generally, Tea Production and Processing Technician performs the following responsibilities:

a) Tea tree pruning
b) Tea picking and preservation
c) Tea processing preparation
d) Tea garden construction
e) Tea garden management
f) Equipment operation and maintenance
g) Tea packaging and storage
h) Disease and insect pest control of tea trees
i) Work safety in tea gardens
j) Tea processing technology control
k) Tea quality control
l) Tea marketing and cost accounting and control

The Occupational Standards have been clustered into NTA qualification levels i.e. NTA level 4, 5 and 6.

## 4.0. VALIDITY PERIOD

Due to the rapid development of technology, the validity period of occupational standards is 3-5 years. The review will proceed in the same manner as the one before it, with new occupational standards being developed based on current trends of the labour market.

## 5.0. OCCUPATIONAL STANDARDS

## 5.1 OCCUPATIONAL STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN - NTA 6

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | DISEASE AND INSECT PEST CONTROL OF TEA TREES | **DUTY NO.** | 601 |
| **TASK TITLE** | INSECT PEST CONTROL OF TEA TREES | **TASK NO.** | 6011 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to control the occurrence of tea tree pests through agricultural, physical, biological, chemical and other measures, ensuring the normal economic benefits of tea trees. | | |
| **RANGE STATEMENT** | The task can be performed in the tea gardens under the supervision of senior tea production and processing technicians. The tools and equipment to be used include:<br>1. Tea tree pruning equipment;<br>2. Pesticide application equipment. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Identify the types of tea tree insect pests;<br>2. Detect pest density and developmental progress;<br>3. Develop an integrated prevention and control plan for tea tree pests, and determine the prevention and control methods and periods;<br>4. Implement prevention and control according to the formulated plan;<br>5. Carry out pesticide prevention and control. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Determine the types and occurrence regularity of tea tree insect pests based on their morphological characteristics and damage patterns;<br>1.2 Use pest investigation methods to investigate and determine the population density and development process of pests;<br>1.3 Develop a comprehensive prevention and control plan for tea tree pests based on the standards for insect pest control of tea trees;<br>1.4 Implement prevention and control measures in accordance with pesticide safety use standards and prevention and control plans.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Regulations for investigation of tea tree pests;<br>2.2 Regulations for comprehensive prevention and control of tea tree pests;<br>2.3 Regulations for safe use of pesticides.<br><br>**3.0 Theories** |

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| | The person performing this task must be able to explain the following:<br>3.1 Identification of tea tree pests;<br>3.2 Occurrence regularity and harm threshold of tea tree pests;<br>3.3 Agricultural control of tea tree pests;<br>3.4 Physical control of tea tree pests;<br>3.5 Biological control of tea tree pests;<br>3.6 Pollution-free pesticide control of tea tree pests.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The investigations on tea tree insect pests and the development of comprehensive prevention and control plans are independently completed; tools and materials for tea tree insect pest control are independently selected, and tea tree insect pest control is carried out according to insect pest control standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Tea tree cultivation and management;<br>2. Types and characteristics of pollution-free pesticides for tea tree insect pests;<br>3. Use and maintenance of instruments for pesticide prevention and control of tea tree insect pests;<br>4. Agrometeorology. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | DISEASE AND INSECT PEST CONTROL OF TEA TREES | **DUTY NO.** | 601 |
| **TASK TITLE** | DISEASE CONTROL OF TEA TREES | **TASK NO.** | 6012 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to control the occurrence of tea tree diseases through agricultural, physical, biological, chemical and other measures, ensuring the normal economic benefits of tea trees. | | |
| **RANGE STATEMENT** | The task can be performed in the tea gardens under the supervision of senior tea production and processing technicians. The tools and equipment to be used include:<br>1. Tea tree pruning equipment;<br>2. Pesticide application equipment. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Identify the types of tea tree diseases;<br>2. Detect the extent of disease occurrence;<br>3. Develop an integrated prevention and control plan for tea tree diseases, and determine the prevention and control methods and periods;<br>4. Implement prevention and control according to the formulated plan;<br>5. Observe the safe use and protective measures of pesticides during pesticide prevention and control. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Determine the types and occurrence regularity of tea tree diseases based on the characteristics of disease symptoms;<br>1.2 Use disease investigation methods to investigate and determine the extent of disease occurrence;<br>1.3 Develop a comprehensive prevention and control plan for tea tree diseases based on the standards for disease control of tea trees;<br>1.4 Implement prevention and control measures in accordance with pesticide safety use standards and prevention and control plans.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Regulations for investigation of tea tree diseases;<br>2.2 Regulations for comprehensive prevention and control of tea tree diseases;<br>2.3 Regulations for safe use of pesticides.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 Identification of tea tree diseases;<br>3.2 Occurrence regularity of tea tree diseases; |

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| | 3.3 Agricultural control of tea tree diseases;<br>3.4 Physical control of tea tree diseases;<br>3.5 Biological control of tea tree diseases;<br>3.6 Pollution-free pesticide control of tea tree diseases.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The investigations on tea tree diseases and the development of comprehensive prevention and control plans are independently completed; tools and materials for tea tree disease control are independently selected, and tea tree disease control is carried out according to disease control standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Tea tree cultivation and management;<br>2. Types and characteristics of pollution-free pesticides for tea tree diseases;<br>3. Use and maintenance of instruments for pesticide prevention and control of tea tree diseases;<br>4. Agrometeorology. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | WORK SAFETY IN TEA GARDENS | **DUTY NO.** | 602 |
| **TASK TITLE** | METEOROLOGICAL DISASTERS AND PROTECTION IN TEA GARDENS | **TASK NO.** | 6021 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to promptly prevent tea tree drought and heat disasters caused by extreme weather, or take effective remedial measures after tea trees are affected by such disasters. | | |
| **RANGE STATEMENT** | The task can be performed in the tea gardens under the supervision of senior tea production and processing technicians. The tools and equipment to be used include:<br>1. Mini-tiller;<br>2. Ditcher;<br>3. Cropper;<br>4. Sprayer. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Adhere to safety and health precautions when performing this task;<br>2. Identify the symptoms and levels of drought damage of tea trees;<br>3. Carry out drought prevention measures for tea trees, such as irrigation, covering, cultivation to maintain soil moisture, and spraying water retention and warming agents;<br>4. Carry out remedial measures after tea tree drought damage;<br>5. Identify the symptoms of tea tree heat damage;<br>6. Carry out measures to prevent tea tree heat damage, such as watering, covering, shading, and spraying plant growth regulators;<br>7. Carry out remedial measures after tea tree heat damage. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Identify the symptoms of tea tree drought and heat damage;<br>1.2 Analyse the causes of drought and heat damage to tea trees;<br>1.3 Carry out measures to prevent drought and heat damage to tea trees based on the actual situation;<br>1.4 Carry out remedial measures for drought and heat damage to tea trees based on the actual situation.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 The five base point temperature of tea trees (maximum temperature, minimum temperature, optimal temperature, minimum and maximum affected temperature, minimum and maximum lethal temperature);<br>2.2 The critical period of water content in tea trees.<br><br>**3.0 Theories**<br>The person performing this task must be able to |

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| | explain the following:<br>3.1 The application of the five base point temperature principle for tea trees;<br>3.2 The principle for the prevention and control of drought damage in tea trees;<br>3.3 The principle for the prevention and control of heat damage in tea trees.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | Independent defense measures against drought and heat damage to tea trees in special climates, or remedial measures based on the symptoms of drought and heat damage that have occurred to tea trees are completed. |
| **CIRCUMSTANTIAL KNOWLEDGE** | Detailed knowledge about:<br>1. Occupational safety and health;<br>2. The impact of water on plants;<br>3. The impact of temperature on plants;<br>4. Climate prediction methods;<br>5. The microclimate in tea gardens. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | WORK SAFETY IN TEA GARDENS | **DUTY NO.** | 602 |
| **TASK TITLE** | WORK SAFETY IN POLLUTION-FREE TEA GARDENS | **TASK NO.** | 6022 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to build and manage pollution-free tea gardens, and produce pollution-free tea. | | |
| **RANGE STATEMENT** | The task can be performed in the tea gardens under the supervision of senior tea production and processing technicians. The tools and equipment to be used include:<br>1. Mini-tiller;<br>2. Ditcher;<br>3. Cropper;<br>4. Solar insecticidal lamp;<br>5. Insect-catching plate. | | |

**EVIDENCE REQUIREMENT**

| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
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| The person performing this task must be able to do the following:<br>1. Select a pollution-free tea producing area that meets the requirements;<br>2. Plan and construct pollution-free tea garden bases;<br>3. Set up a road system for tea gardens;<br>4. Set up a water-saving irrigation system for tea gardens;<br>5. Select suitable superior varieties;<br>6. Plant high-quality tea seedlings;<br>7. Scientifically and reasonably use fertilizers;<br>8. Carry out green prevention and control of diseases and insect pests. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Reasonably plan and design tea gardens;<br>1.2 Set up safety facilities and equipment;<br>1.3 Reasonably plan the irrigation system;<br>1.4 Carry out waste disposal;<br>1.5 Carry out reasonable fertilization of tea trees;<br>1.6 Carry out comprehensive prevention and control of diseases and insect pests;<br>1.7 Meet the quality and safety requirements for pollution-free tea products.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Hygienic standards for pollution-free tea;<br>2.2 Fertilization principles for tea trees;<br>2.3 Green prevention and control of diseases and insect pests.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 Standards for pollution-free tea;<br>3.2 Agricultural residue standards for tea; |

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| | 3.3 Heavy metal residue standards for tea;<br>3.4 Harmful microbe standards for tea.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The independent planning and construction of the pollution-free tea garden base is completed to cultivate and produce pollution-free tea raw materials. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Occupational safety and health;<br>2. Seedlings of tea trees;<br>3. Weed control methods;<br>4. Standard for safe use of pesticides;<br>5. Maximum residue limits of pesticides in food;<br>6. Hygienic standards for pollution-free tea. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | WORK SAFETY IN TEA GARDENS | **DUTY NO.** | 602 |
| **TASK TITLE** | WORK SAFETY IN ORGANIC TEA GARDENS | **TASK NO.** | 6023 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to build and manage green tea gardens, and produce green food tea. | | |
| **RANGE STATEMENT** | The task can be performed in the tea gardens under the supervision of senior tea production and processing technicians. The tools and equipment to be used include:<br>1. Mini-tiller;<br>2. Ditcher;<br>3. Cropper;<br>4. Solar insecticidal lamp;<br>5. Insect-catching plate. | | |

| **EVIDENCE REQUIREMENT** | |
|---|---|
| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Select an organic tea producing area that meets the requirements;<br>2. Plan and construct organic tea garden bases;<br>3. Complete the selection and treatment of sodding;<br>4. Cultivate and loosen the soil;<br>5. Feed earthworms between rows;<br>6. Use dolomite powder to improve the soil;<br>7. Select suitable fertilizers;<br>8. Use germination acceleration fertilizers;<br>9. Use aestivo-autumnal topdressing according to local conditions;<br>10. Use foliage fertilizers;<br>11. Use agrotechnical measures and strengthen the cultivation and management of tea gardens;<br>12. Carry out biological control of diseases and insect pests;<br>13. Carry out weed control;<br>14. Use green manure intercropping technology. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Cultivate and manage organic tea garden soil;<br>1.2 Fertilize organic tea gardens;<br>1.3 Carry out diseases and insect pest control in organic tea gardens;<br>1.4 Effectively utilize the green manure intercropping technology in organic tea gardens.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Environmental air quality standards for organic tea gardens;<br>2.2 Limit standards for harmful heavy metal elements in organic tea garden soil;<br>2.3 Limit standards for harmful heavy metals and certain compounds in organic tea gardens;<br>2.4 Fertilization guidelines for organic tea;<br>2.5 Principles for diseases and insect pest control in organic tea gardens.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following: |

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| | 3.1 The standard for organic tea;<br>3.2 The advantages of soil cover;<br>3.3 The advantages of tillage and soil scarification;<br>3.4 The concept of green manure.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The independent planning and construction of the organic tea garden base is completed to cultivate and produce organic tea raw materials. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Occupational safety and health;<br>2. Types and properties of fertilizers;<br>3. Soil improvement;<br>4. Biological control of diseases and insect pests. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA PROCESSING TECHNOLOGY CONTROL | **DUTY NO.** | 603 |
| **TASK TITLE** | WITHERING PROCESS CONTROL | **TASK NO.** | 6031 |
| **PERFORMANCE CRITERIA** | The person performing this task must proficiently and correctly complete the acceptance of fresh leaves, preparation before withering, withering operation, and cleaning and organising after the operation. | | |
| **RANGE STATEMENT** | The task can be performed in the tea production workshops under the supervision of senior tea production and processing technicians.<br>The tools and equipment to be used include:<br>1. Withering trough or continuous withering machine;<br>2. Fresh leaf transport tool;<br>3. Fresh leaf container;<br>4. Cleaning and organisation tool. | | |

| **EVIDENCE REQUIREMENT** | |
|---|---|
| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Adhere to safety and health precautions when performing this task;<br>2. Prepare a withering site;<br>3. Debug withering machinery and equipment;<br>4. Accept fresh leaves;<br>5. Pretreat fresh leaves;<br>6. Implement machine withering of fresh leaves;<br>7. Set withering parameters based on the condition of fresh leaves and environmental conditions;<br>8. Adjust the withering parameters in good time based on the condition of raw leaves and environmental conditions;<br>9. Predict the duration of fresh leaf withering;<br>10. Adjust the withering machinery parameters in good time according to changes in environmental temperature and humidity;<br>11. Observe the degree of withering and determine the endpoint of withering;<br>12. Remove fresh leaves from the machine. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Operate the withering machinery;<br>1.2 Determine whether the fresh leaves meet the standards;<br>1.3 Determine the withering parameters;<br>1.4 Determine the endpoint of withering.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 The role and internal mechanism of withering;<br>2.2 The regularity and trend of changes in the appearance of fresh leaves during the withering process;<br>2.3 The impact of environment on the withering process;<br>2.4 The impact of fresh leaf conditions on the withering process;<br>2.5 The impact of withering parameters on the withering process;<br>2.6 The impact of withering degree on the quality of tea products;<br>2.7 Definition of tea grades (F.B.O.P, B.O.P, B.P, F.O.P, O.P) and their requirements for raw materials. |

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| | **3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 The law of changes in the physicochemical properties of fresh leaves during the withering process;<br>3.2 The appearance and odor of withered leaves at the endpoint of withering.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills;<br>4.4 Sensory evaluation skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The withering site is independently prepared, the withering machinery is debugged, and the withering operations are carried out in accordance with withering standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | Detailed knowledge about:<br>1. Occupational safety and health;<br>2. Hygienic conditions and layout of production sites;<br>3. Cleaning and organisation after production;<br>4. Use and maintenance of withering machinery;<br>5. The fresh leaf characteristics of common tea tree varieties. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA PROCESSING TECHNOLOGY CONTROL | **DUTY NO.** | 603 |
| **TASK TITLE** | ROLLING PROCESS CONTROL | **TASK NO.** | 6032 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to proficiently and correctly complete the preparation work before rolling, rolling operation, as well as cleaning and organisation after the rolling operation. | | |
| **RANGE STATEMENT** | The task can be performed in the tea production workshops under the supervision of senior tea production and processing technicians.<br>The tools and equipment to be used include:<br>1. Twisting-cutting machine, CTC machine, and LTP machine;<br>2. Raw material transport tool;<br>3. Raw material container;<br>4. Cleaning and organisation tool. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Adhere to safety and health precautions when performing this task;<br>2. Prepare a rolling site;<br>3. Debug the rolling machine;<br>4. Implement machine rolling of withering leaves;<br>5. Control rolling parameters based on withered leaves and environmental conditions, including leaf amount, roll cutting frequency, and curling time;<br>6. Observe the degree of rolling and determine the endpoint of rolling;<br>7. Remove the rolled leaves from the machine. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Operate the rolling machinery;<br>1.2 Determine the condition of withered leaves;<br>1.3 Determine the climate situation;<br>1.4 Determine the rolling parameters;<br>1.5 Determine the endpoint of rolling.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 The role and internal mechanism of rolling;<br>2.2 The regularity and trend of changes in the appearance of raw leaves during the rolling process;<br>2.3 The influence of temperature, humidity, and ventilation on the rolling process in different environments;<br>2.4 The influence of different raw leaf conditions (thickness, tenderness, water content, and hardness) on the rolling process;<br>2.5 The influence of rolling machine parameters on the rolling process;<br>2.6 The influence of rolling degree on the quality of tea products. |

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| | **3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 The law of changes in the physicochemical properties of raw leaves during the rolling process;<br>3.2 The appearance state of raw leaves at the endpoint of rolling.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills;<br>4.4 Sensory evaluation skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The rolling site is independently prepared, the rolling machinery is debugged, and the rolling operations are carried out in accordance with rolling standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Occupational safety and health;<br>2. Hygienic conditions and layout of production sites;<br>3. Cleaning and organisation after production;<br>4. Use and maintenance of rolling machine. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA PROCESSING TECHNOLOGY CONTROL | **DUTY NO.** | 603 |
| **TASK TITLE** | FERMENTATION PROCESS CONTROL | **TASK NO.** | 6033 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to proficiently and correctly complete the preparation work before fermentation, control the fermentation process conditions, accurately determine the fermentation endpoint and terminate fermentation, as well as clean and organise after the fermentation operation. | | |
| **RANGE STATEMENT** | The task can be performed in the tea production workshops under the supervision of senior tea production and processing technicians.<br>The tools and equipment to be used include:<br>1. Fermentation machine or instrument;<br>2. Auxiliary tools for fermentation;<br>3. Raw material transport tool;<br>4. Raw material container;<br>5. Cleaning and organisation tool. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Adhere to safety and health precautions when performing this task;<br>2. Prepare a fermentation site;<br>3. Debug the fermentation machine;<br>4. Implement machine fermentation of rolled leaves;<br>5. Select appropriate fermentation parameters based on the situation of rolled leaves and environmental conditions, including temperature, humidity, time duration, and leaf spreading thickness;<br>6. Determine the fermentation endpoint and terminate the fermentation. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Operate the fermentation machine;<br>1.2 Determine the condition of rolled leaves;<br>1.3 Determine the environmental situation;<br>1.4 Determine fermentation parameters;<br>1.5 Determine the fermentation endpoint.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 The role and internal mechanism of fermentation;<br>2.2 The changes in the contents of tea during fermentation and their impact on the sensory quality of tea;<br>2.3 The impact of temperature, humidity, and ventilation on the fermentation process;<br>2.4 The impact of different raw leaf conditions, including the stacking thickness, water content, and cell damage rate of raw leaves, on the fermentation process;<br>2.5 The impact of fermentation degree on the |

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| | quality of tea products.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 The appearance and odor that tea leaves should possess before fermentation;<br>3.2 The law of changes in the physicochemical properties of tea during the fermentation process;<br>3.3 The appearance and odor of tea leaves at the endpoint of fermentation.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills;<br>4.4 Sensory evaluation skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The fermentation site is independently prepared, the fermentation machinery is debugged, and the fermentation operations are carried out in accordance with fermentation standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Occupational safety and health;<br>2. Hygienic conditions and layout of production sites;<br>3. Cleaning and organisation after production;<br>4. Use and maintenance of fermentation machine. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA PROCESSING TECHNOLOGY CONTROL | **DUTY NO.** | 603 |
| **TASK TITLE** | DRYING PROCESS CONTROL | **TASK NO.** | 6034 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to proficiently and correctly complete the preparation work before drying, set the drying process and parameters, complete the drying operation, and clean and organise after the drying operation. | | |
| **RANGE STATEMENT** | The task can be performed in the tea production workshops under the supervision of senior tea production and processing technicians.<br>The tools and equipment to be used include:<br>1. Drying machine;<br>2. Raw material transport tool;<br>3. Raw material container;<br>4. Cleaning and organisation tool. | | |

**EVIDENCE REQUIREMENT**

| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
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| The person performing this task must be able to do the following:<br>1. Adhere to safety and health precautions when performing this task;<br>2. Prepare a drying site;<br>3. Debug the drying machine;<br>4. Implement machine drying;<br>5. Control the drying process based on the fineness and water content of raw materials, and set drying parameters for different stages;<br>6. Determine the drying endpoint and terminate the drying process;<br>7. Package products for storage. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Operate the drying machine;<br>1.2 Determine the fineness and water content of raw materials;<br>1.3 Determine the drying process and drying parameters;<br>1.4 Determine the drying endpoint.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 The role and internal mechanism of drying;<br>2.2 The impact of raw material water content, hot air temperature, hot air humidity, leaf thickness, and air volume on the quality of tea during different stages of drying;<br>2.3 The regularity and trend of changes in the content of tea leaves during the drying process;<br>2.4 The impact of drying degree on the quality of tea products.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following: |

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| | 3.1 The theory of tea drying kinetics;<br>3.2 The drying characteristics and applicability of different drying machines;<br>3.3 The appearance and odor of tea leaves at the endpoint of drying.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills;<br>4.4 Sensory evaluation skills.<br><br>**5.0 Estimation Skills**<br>5.1 The weight reduction of raw leaves is utilized to quickly estimate the water content of fresh leaves. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The drying site is independently prepared, the drying machinery is debugged, and the drying operations are carried out in accordance with drying standards. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Occupational safety and health;<br>2. Hygienic conditions and layout of production sites;<br>3. Cleaning and organisation after production;<br>4. Use and maintenance of drying machine. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA QUALITY CONTROL | **DUTY NO.** | 604 |
| **TASK TITLE** | TEA QUALITY INSPECTION | **TASK NO.** | 6041 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to proficiently and correctly complete the sensory evaluation and determination of physicochemical indicators, hygienic indicators, and net content of tea, as well as correctly record and organise testing data. | | |
| **RANGE STATEMENT** | The task can be performed in the laboratory under the supervision of senior tea production and quality inspection technicians.<br>The tools and equipment to be used include:<br>1. Tea sensory evaluation equipment;<br>2. Conventional equipment for detecting physicochemical indicators of tea. | | |

**EVIDENCE REQUIREMENT**

| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
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| The person performing this task must be able to do the following:<br>1. Check and interpret the quality standards of tea products;<br>2. Prepare sensory evaluation equipment to conduct sensory evaluation of broken black tea and record it correctly;<br>3. Determine the physicochemical indicators of different varieties of broken black tea, and correctly record them based on the physicochemical indicator detection standards;<br>4. Determine the hygienic indicators of broken black tea, and correctly record them based on the hygienic indicator detection standards;<br>5. Determine the net content of broken black tea, and correctly record it based on the net content detection standards. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Properly conduct sensory evaluation of broken black tea and record it;<br>1.2 Determine the physicochemical indicators of broken black tea, and record the data;<br>1.3 Determine the hygienic indicators of broken black tea, and record the data;<br>1.4 Determine the net content of broken black tea, and record the data.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Quality standards for tea products;<br>2.2 Methods for sensory evaluation of tea;<br>2.3 Methods and principles for physical and chemical detection of tea;<br>2.4 Methods and principles for hygienic indicator detection of tea;<br>2.5 Rules and methods for detecting the net content of tea products of different specifications.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 The appearance and internal quality requirements for different levels of broken black tea; |

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| | 3.2 The experimental phenomena and indicator limit judgment during the determination of quality indicators and hygienic indicators of broken black tea.<br><br>**4.0 Essential Skills**<br>4.1 Practical operation skills;<br>4.2 Data processing and report writing skills;<br>4.3 Teamwork and independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The quality inspection of broken black tea is carried out independently. |
| **CIRCUMSTANTIAL KNOWLEDGE** | Detailed knowledge about:<br>1. Quality standards for tea products from different varieties and origins;<br>2. Knowledge of laboratory safety, and use and maintenance of experimental equipment;<br>3. Inspection data recording and report writing methods. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA QUALITY CONTROL | **DUTY NO.** | 604 |
| **TASK TITLE** | TEA QUALITY CONTROL | **TASK NO.** | 6042 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to conduct quality control of tea processing enterprises in accordance with the tea quality and safety control specifications. | | |
| **RANGE STATEMENT** | The task can be performed in the tea processing enterprises under the supervision of production and quality control personnel for broken black tea. The tools and equipment to be used include:<br>1. Tea quality and safety control specifications;<br>2. Record book. | | |

**EVIDENCE REQUIREMENT**

| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
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| The person performing this task must be able to do the following:<br>1. Check and interpret relevant documents such as tea quality and safety control specifications;<br>2. Prepare record sheets according to specifications and document requirements;<br>3. Manage the factory environment, factory facilities, processing equipment and tools, hygiene, and processing process of tea processing enterprises in accordance with the tea quality and safety control specifications;<br>4. Properly record and manage documents. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Manage the factory environment and facilities of tea processing enterprises;<br>1.2 Determine whether the processing equipment and tools of tea processing enterprises meet management requirements;<br>1.3 Determine whether the hygienic management of tea processing enterprises meets management requirements;<br>1.4 Determine whether the processing process of tea processing enterprises meets management requirements;<br>1.5 Determine whether the product management and inspection of tea processing enterprises meet the requirements;<br>1.6 Determine whether the product traceability and recall system of tea processing enterprises meets management requirements;<br>1.7 Determine whether the personnel and record files of tea processing enterprises meet management requirements.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Tea quality and safety control specifications;<br>2.2 Quality control procedures for tea production enterprises;<br>2.3 Quality control methods and corrective measures |

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| | for tea products;<br>2.4 Quality control record methods and document writing.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 Principles and methods for production quality control;<br>3.2 Tea quality and safety control specifications.<br><br>**4.0 Essential Skills**<br>4.1 Communication skills;<br>4.2 Teamwork skills;<br>4.3 Independent thinking skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The product quality control of tea enterprises is carried out in accordance with the requirements of tea quality and safety control specifications. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Factory design and environmental air quality standards for tea enterprises;<br>2. Food safety and quality control systems;<br>3. Good operation specifications for tea processing. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA MARKETING AND COST ACCOUNTING AND CONTROL | **DUTY NO.** | 605 |
| **TASK TITLE** | TEA MARKETING | **TASK NO.** | 6051 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to provide different tea drinks according to the needs of guests, and introduce tea health and nutrition knowledge to guests; develop and implement tea sales plans; organise, plan and design different types of tea parties to ensure the economic benefits brought by tea sales. | | |
| **RANGE STATEMENT** | The task can be performed in the tea stores under the supervision of senior tea production and processing technicians, senior tea evaluators, senior tea art technicians, and large tea enterprise managers.<br>The tools and equipment to be used include:<br>1. Tea brewing utensils;<br>2. Tea evaluation utensils. | | |

**EVIDENCE REQUIREMENT**

| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
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| The person performing this task must be able to do the following:<br>1. Analyse tea products with market demand;<br>2. Process tea products with market demand;<br>3. Sell different tea products to meet different consumer demands;<br>4. Evaluate the quality characteristics of tea products. | **Detailed knowledge about:**<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Be proficient in the deep processing and comprehensive utilization of tea, as well as the development of new products, and utilize technical skills for tea evaluation;<br>1.2 Carry out sales in combination with certain humanistic and social knowledge, including consumer psychology, folk customs and economic geography, flower arrangement and incense lore, and language art;<br>1.3 Distinguish the grade of tea, and use different brewing methods to showcase the best taste of tea;<br>1.4 Utilize simple tea reception etiquette, possess the ability to perform tea art, and have basic skills in tea sales and management.<br><br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Different demands of consumers;<br>2.2 Quality characteristics of different grades of tea products;<br>2.3 Various brewing techniques;<br>2.4 Nutritional functions of tea products. |

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| | **3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 Knowledge of tea marketing;<br>3.2 Knowledge of consumer psychology;<br>3.3 Tea evaluation and tea culture.<br><br>**4.0 Essential Skills**<br>4.1 Interpersonal communication skills;<br>4.2 Social etiquette skills;<br>4.3 Verbal expression skills;<br>4.4 Sensory evaluation skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The mastery of tea culture and tea processing knowledge is applied to understand guests' consumption psychology and recommend matching tea products based on their consumption demands. |
| **CIRCUMSTANTIAL KNOWLEDGE** | Detailed knowledge about:<br>1. Techniques for brewing tea;<br>2. Tea party organisation and planning;<br>3. General knowledge of consumer psychology;<br>4. Sensory evaluation and inspection of tea. |

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| **OCCUPATION** | TEA PRODUCTION AND PROCESSING TECHNICIAN | **OCCUPATION CODE** | |
| **DUTY TITLE** | TEA MARKETING AND COST ACCOUNTING AND CONTROL | **DUTY NO.** | 605 |
| **TASK TITLE** | COST ACCOUNTING AND CONTROL | **TASK NO.** | 6052 |
| **PERFORMANCE CRITERIA** | The person performing this task must be able to timely understand the production and operation status of the enterprise and the dynamic demand of the tea market based on cost accounting, and help the enterprise achieve optimal allocation and rational use of resources for tea production and operation, thereby achieving profit growth. | | |
| **RANGE STATEMENT** | The task can be performed in tea enterprises, tea gardens and tea plantations under the supervision of senior tea enterprise managers.<br>The tools and equipment to be used include:<br>1. Cost accounting record ledgers;<br>2. Cost accounting software;<br>3. Computers. | | |

| **EVIDENCE REQUIREMENT** | |
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| **PRACTICAL PERFORMANCE** | **UNDERPINNING KNOWLEDGE** |
| The person performing this task must be able to do the following:<br>1. Understand the operational status of the enterprise itself;<br>2. Reasonably set up cost accounting content;<br>3. Develop and implement a cost accounting system;<br>4. Supervise and manage the cost accounting system;<br>5. Improve the level of cost accounting personnel. | Detailed knowledge about:<br>**1.0 Methods**<br>The person performing this task must be able to explain how to:<br>1.1 Complete the statistics and cost accounting of the economic resources consumed (soil, manpower, technology, and funds) in the process of tea production and operation, and provide guidance for the subsequent production, processing, and operation of tea based on the proportion of resources consumed in the overall resource volume;<br>1.2 Develop the best tea blending plan based on raw material costs and marketing trends, reduce costs, and enhance efficiency;<br>1.3 Utilize tea cost accounting and control, reduce production and processing costs, and enhance the core competitiveness of tea enterprises in the tea market;<br>1.4 Scientifically and reasonably evaluate the level of cost accounting content indicators to make cost accounting more scientifically and reasonably control tea enterprises.<br>**2.0 Principles**<br>The person performing this task must be able to explain the following principles:<br>2.1 Production and operation characteristics of tea enterprises; |

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| | 2.2 Characteristics of tea production process;<br>2.3 Laws of tea market demand;<br>2.4 Use of cost accounting methods;<br>2.5 Preparation of cost accounting ledger table.<br><br>**3.0 Theories**<br>The person performing this task must be able to explain the following:<br>3.1 Knowledge of financial budgeting;<br>3.2 Basic knowledge of cost accounting;<br>3.3 Knowledge of enterprise operation and management.<br><br>**4.0 Essential Skills**<br>4.1 Teamwork skills;<br>4.2 Analysis and summary skills;<br>4.3 Organisational leadership skills. |
| **DESCRIPTION OF THE END PRODUCT / SERVICE** | The cost of tea enterprises is more scientifically and reasonably controlled in accordance with the requirements of cost accounting. |
| **CIRCUMSTANTIAL KNOWLEDGE** | **Detailed knowledge about:**<br>1. Basic knowledge of computers;<br>2. Preparation of financial budget;<br>3. Common sense of market sales trends. |

**TABLE 1: DACUM CHARTS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN - NTA 6**

| DUTIES | TASKS | ENABLERS |
|---|---|---|
| 1.0 Disease and insect pest control of tea trees | 1.1 Insect pest control of tea trees.<br>1.2 Disease control of tea trees. | **General skills and knowledge**<br>· Ability to identify tea tree diseases and insect pests<br>· Standards for disease and insect pest control of tea trees<br>· Application of commonly-used pesticides for tea trees<br><br>**Tools and equipment**<br>· Tea tree cultivation and management equipment<br>· Pesticide application equipment<br><br>**Materials**<br>· Tea gardens and pesticide application equipment that meet the requirements for disease and insect pest control<br><br>**Requirements for employees**<br>· Teamwork spirit, communication, and independent thinking |
| 2.0 Work safety in tea gardens | 2.1 Meteorological disasters and protection in tea gardens.<br>2.2 Work safety in pollution-free tea gardens.<br>2.3 Work safety in organic tea gardens. | **General skills and knowledge**<br>· Ecological environment requirements for tea gardens<br>· Planning and construction of tea garden bases<br>· Soil cultivation and management in tea gardens<br>· Scientific fertilization techniques in tea gardens<br>· Green control techniques for diseases and insect pest control in tea gardens<br>· Intercropping techniques in tea gardens<br><br>**Tools and equipment**<br>· Mini-tiller<br>· Ditcher<br>· Cropper<br>· Solar insecticidal lamp |

| DUTIES | TASKS | ENABLERS |
|---|---|---|
| | | · Shovel<br>· Fertilizer transfer vehicle<br>· Sprayer<br><br>**Materials**<br>· Fertilizers that meet the requirements of pollution-free and green food tea production, efficient, low toxicity, and low residue pesticides that meet the requirements of pollution-free tea production, green manure plant seeds, and dolomite powder<br><br>**Requirements for employees**<br>· Teamwork spirit, cooperation competence, communication skills, and independent thinking |
| 3.0 Tea processing technology control | 3.1 Withering process control.<br>3.2 Rolling process control.<br>3.3 Fermentation process control.<br>3.4 Drying process control. | **General skills and knowledge**<br>· The purpose, basic principles, and key parameter control of fresh leaf withering, rolling, fermentation, and drying<br>· The trend of changes in the content of tea leaves during withering, rolling, fermentation and drying processes, and its relationship with the quality of tea products<br>· Debugging, use, and maintenance of tea production equipment<br><br>**Tools and equipment**<br>· Record book<br>· Withering trough or continuous withering machine<br>· Rotor twisting-cutting machine or CTC twisting-cutting equipment<br>· Tea fermentation equipment<br>· Tea drying equipment<br>· Fresh leaf storage equipment or utensils<br>· Temperature and humidity control equipment<br>· Tea transportation equipment or utensils<br>· Cleaning and organisation tools |

| DUTIES | TASKS | ENABLERS |
|---|---|---|
| | | **Materials**<br>· Raw materials of fresh tea leaves and tea processing equipment suitable for tea processing<br><br>**Requirements for employees**<br>· Teamwork spirit, communication skills, independent thinking, estimation competence, and sensory evaluation skills |
| 4.0 Tea quality control | 4.1 Tea quality inspection.<br>4.2 Tea quality control. | **General skills and knowledge**<br>· Quality standard development<br>· Procurement inspection<br>· Processing process control<br>· Storage and keeping<br><br>**Tools and equipment**<br>· Tea sensory evaluation equipment<br>· Conventional equipment for detecting physicochemical indicators of tea<br>· Tea quality inspection record form<br>· Tea quality and safety control specifications<br>· Quality control record book<br><br>**Materials**<br>· Tea products that meet ex-factory sales requirements<br><br>**Requirements for employees**<br>· Teamwork spirit, communication, and independent thinking |
| 5.0 Tea marketing and cost accounting and control | 5.1 Tea marketing.<br>5.2 Cost accounting and control. | **General skills and knowledge**<br>· Quality characteristics and nutritional functions of various types of tea<br>· Brewing methods and techniques of various types of tea<br>· Tea evaluation and tea culture knowledge<br>· Marketing and consumer psychology knowledge<br>· Composition of costs in tea production and processing process |

| DUTIES | TASKS | ENABLERS |
|---|---|---|
| | | · Financial accounting skills<br><br>**Tools and equipment**<br>· Cost accounting ledger table or cost accounting software<br>· Tea brewing and evaluation utensils<br><br>**Materials**<br>· Tea products that meet ex-factory sales requirements<br>· Other materials for organising the marketing activities<br><br>**Requirements for employees**<br>· Proper appearance and demeanor<br>· Keen observation<br>· Good psychological quality<br>· Good problem-discovering ability |