

National Vocational Qualification

Competency Standards

for

Meat Technology – Level 4

(Assistant Meat Processor / Assistant Supervisor)



National Vocational and Technical Training Commission, Islamabad

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1. INTRODUCTION

Meat Industry is one of the largest employer in Pakistan, and demand for processed meat has shown tremendous increase due to busy life and increased awareness about Meat safety and hygiene. Production of skilled human resources in the area of meat processing and preservation always will help to create business opportunities as well as jobs at the local community levels. The present Federal Government has rightly recognized the immense potential of meat processing and preservation in Pakistan and is now taking steps to tap this potential to overcome the shortfalls in this sector. The goal of this course is to provide students with a fundamental understanding of meat technology and to ensure that students are technically ready for entrepreneurship or jobs in the meat industry through a practical, problem-solving approach. Pakistan's meat processing industry is broadly categorized into different sectors like Halal slaughtering and handling of carcass, poultry processing, seafood processing, meat production, frozen meat processing.

Preservation can be done by chilling, freezing, canning, fermentation, dehydration, smoking, by different chemical agents, and various non-thermal techniques. Production of a range of meat products using these preservation techniques and processes is adopted by the meat industries. Students will develop an understanding of shelf life and nutritional consequences of preservation.

The students will also learn methods to process and preserve different types of meat, sampling and handling techniques, GMPs, HACCP, different meat contaminations, meat quality control, quality assurance, meat storage, and meat shipping, etc.

The main goal of this course on meat preservation processing technologies is to prepare a student as a supervisor for efficient meat processing to increase the productivity with effective quality control and to preserve the environment and fulfill consumer expectations.

2. PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to give the trainee a thorough understanding of meat processing and preservation in the industry with effective quality control and safety of the meat products. Meat processing and preservation are diversified and continuously subject to changes. It is therefore important to stress the need for a multidisciplinary approach to meet the challenges within the this sector. Upon successful completion of this course the trainees should be able to:

- Explain the core elements of meat processing and preservation techniques
- Understand the chemistry underlying the properties and reactions of various meat components
- Understand the principles behind analytical techniques associated with meat.
- Be able to use the laboratory techniques common to basic and applied meat chemistry.
- Understand the basic principles and practices of cleaning and sanitation in meat processing operations.
- Be able to apply the principles of meat science to control and assure the quality and safety of meat products.
- Be aware of current topics of importance to the meat industry.
- Work effectively with others; provide supervision in a variety of situations and can deal with individual and/or group conflict.

3. CODE OF QUALIFICATION

The International Standard Classification of Education (ISCED) is a framework for assembling, compiling, and analyzing cross-nationally comparable statistics on education and training, ISCED codes for these qualifications as assigned as follow:

ISCED Classification for Meat Technology level 4	
Code	Description
000000000	National Vocational qualification Level-4 in Assistant Meat Processor / Assistant Supervisor

4. QUALIFICATION DEVELOPMENT COMMITTEE

The following members participated in the qualifications development workshop from 14-18 March 2022 in PITAC, Lahore:

S#	Name	Designation
1.	Mr. Muhammad Aasim	Assistant Director, NAVTTC Coordinator
2.	Muhammad Nasir Khan	Ex DD NAVTTC DACUM Facilitator
3.	Mr. Jan Muhammad Amazai	Sluaghtering / Halal Supervisor (Beaf / Motton) Karachi
4.	Dr. Shinawar Waseem Ali	Associate Professor, Punjab University, Lahore
5.	Dr. Muhammad Sohaib	Assistant Professor, UVAS, Lahore
6.	Dr. Kashif Nauman	Assistant Professor, UVAS, Lahore
7.	Mr. Shakir Khan	Professional Quality Solutions Lahore
8.	Mr. Tayyab Tariq	K&Ns Foods, Raiwind Lahore
9.	Dr. Khurram Shahzad	Principal Scientific Officer PCSIR Lahore
10.	Dr. Sania Mazhar	Senior Scientific Officer PCSIR Lahore
11.	Dr. Naseem Zara	Scientific Officer PCSIR Lahore
12.	Ms. Ammara Yasmeen	Scientific Officer PCSIR Lahore
13.	Mr. Muhammad Ahmad	Technical Auditor Halal Food Punjab, Lahore
14.	Ms Noreen Shehzadi	CBT&A Expert, Lahore, PTEVTA
15.	Mr. Mubeen Arshad	Quality Assurance Head YUM Group (Industry)

5. QUALIFICATION VALIDATION COMMITTEE

Sr.	Name	Designation
1.	Mr. Muhammad Nasir Khan	Ex DD NAVTTC DACUM Facilitator
2.	Ms. Saima Asghar	DACUM Expert, Lahore
3.	Mr. Muhammad Aasim	Assistant Director NAVTTC Coordinator
4.	Dr. Shinawar Waseem Ali	Associate Professor/Chairman, Department of Food Sciences, University of the Punjab, Lahore Ex-Quality Assurance Officer K&N Pakistan
5.	Mr. Ibrahim Anwar	Lecturer Food Technology, GCT Nowshera Representative KP-TEVTA
6.	Mr. Muhammad Shahzad Javed	Senior Research Officer, PBTE
7.	Mr. Muhammad Ahmad	Technical Auditor Halal Food Punjab, Lahore
8.	Dr. Ihtisham-Ul-Haq	Assistant Professor, Kauser Abdulla Malik School of Life Science, Forman Christian College (A Chartered University), Lahore
9.	Dr. Muhammad Sohaib	Assistant Professor, Dept. of Food Science and Human Nutrition, University of Veterinary and Animal Sciences, Lahore
10.	Dr. Kashif Nauman	Assistant Professor, Dept. of Meat Science and Technology, University of Veterinary and Animal Sciences, Lahore
11.	Dr. Tabussam Tufail	Assistant Professor, Department of Food Science and Human Nutrition, University of Lahore
12.	Muhammad Saeed Ahmed	Farm Manager, Farm Manager Office, University of Veterinary and Animal Sciences Lahore
13.	Mr. Shakir Manzoor	Manager Operations, Professional Quality Solutions, Lahore

6. ENTRY REQUIREMENTS

Level – 3 qualified in Meat Technology.

7. REGULATIONS FOR THE QUALIFICATION AND SCHEDULE OF UNITS

Not Applicable

8. PACKAGING OF THE QUALIFICATION

The national vocational qualifications are packaged as per the following:

LEVEL-4

Assistant Meat Processor / Assistant Supervisor

1. Receive Meat and Other Raw Materials
2. Coordinate Meat Analysis
3. Assist in Shelf life Determination of Meat
4. Assist in Value-added Product Development
5. Manage Canning Process
6. Maintain Chilling and Freezing Process
7. Apply Meat Preservation Techniques
8. Implement Quality Management System
9. Assist in HACCP Implementation
10. Create Technical Documentation

9. SUMMARY OF COMPETENCY STANDARDS

Sr.	Competency Standards	Estimated Contact Hours			Total Credit Hours	Competency Standard Category
		Theory hours	Practical hours	Total hours		
1.	Receive Meat and Other Raw Materials	18	72	90	9	Core
2.	Coordinate Meat Analysis	24	96	120	12	Core
3.	Assist in Shelf life Determination of Meat	24	96	120	12	Core
4.	Assist in Value-added Product Development	42	168	210	21	Core
5.	Manage Canning Process	24	96	120	12	Core
6.	Maintain Chilling and Freezing Process	18	72	90	9	Core
7.	Apply Meat Preservation Techniques	24	96	120	12	Core
8.	Implement Quality Management System	24	96	120	12	Core
9.	Assist in HACCP Implementation	24	96	120	12	Core
10.	Create Technical Documentation	18	72	90	9	Generic
TOTAL		240	960	1200	120	

CS 1. Receive Meat and Other Raw Materials**Overview (T:18 , P:72 = 90)**

This competency standard covers the skills and knowledge required to handle meat and other materials including ingredients, packaging materials and cleaning agents. The trainees will be able to enhance meat handling skills.

Competency units	Performance criteria
CU1. Inspect meat and other raw materials at receiving	P1: Check meat and other raw materials vehicle's transport P2: Inspect conditions and integrity of the packaging of meat and other materials P3: Check pests infestation in meat and other materials P4: Record temperature of meat
CU2. Store meat and other material as per requirements	P1: Store meat and other materials in required conditions P2: Maintain conditions for spices and other ingredients at room temperature and controlled humidity
CU3. Maintain records	P1: Maintain log book P2: Record information in a standard format

Understanding and Knowledge

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- Quality parameters of raw meat and other raw materials
- Importance of packaging in preservation of meat and other raw materials
- Sampling of meat and other raw materials
- Identification of different meat cuts
- Physical inspection of raw meat
- Storage requirements for raw meat and other raw materials
- Contaminants and meat-borne diseases
- Importance of monitoring meat handling procedures

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard:

- Demonstrate meat cuts
- Examine package quality

Tools & Equipment required:

Sr. No	DESCRIPTION
1	Weighing scale
2	Probe thermometer

CS 2. Coordinate Meat Analysis**Overview: (T:24 , P:96 = 120)**

This competency standard covers the skills and knowledge required to demonstrate the application of nutritional examination and techniques in meat processing and preservation.

Competency Unit	Performance Criteria
CU1. Arrange Meat sampling materials	P1: Organize materials for tagging and recording sample P2: Store samples in freezer and/or cold store
CU2. Coordinate for meat sampling (Physicochemical Analysis)	P1: Collect meat samples for physical analysis P2: Analyze the color and smell of meat sample P3: Record the physical observations P4: Maintain required conditions
CU3. Perform sampling for microbiological analysis	P1: Apply suitable sampling technique P2: Collect sample for microbial analysis P3: Transfer the sample to relevant lab for analysis
CU4. Deliver Samples to lab	P1: Pack sample in sterile bags P2: Timely deliver sample at required conditions
CU5. Obtain results	P1: Collect results from lab P2: Report results/data P3: Maintain record as per procedure

Understanding & Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- Meat sampling techniques
- Sample handling and labelling
- Control of contaminants
- Mechanism of chilling, freezing and thawing
- Define Total Plate Count (TPC)

Critical evidence(s) required:

The trainee needs to produce the following critical evidence(s) to be competent in this competency standard:

- Demonstrate meat sampling
- Evaluate color and smell of meat sample

Tools & Equipment Required:

Sr.	DESCRIPTION
1.	Sterile Beaker
2.	Sterile Graduated pipettes
3.	Sterile Petri Dishes
4.	Sterile Flasks
5.	Sterile Test or culture tubes
6.	Test or culture tube racks
7.	Sterile tools for manipulating food samples; spoons, scissors, forceps, knives, etc.
8.	Dilution Bottles
9.	Bunsen or Fish Burner
10.	Mechanical Blender
11.	Blender Jar
12.	Balance
13.	Vortex mixer
14.	Water bath
15.	Incubator
16.	Colony counter, darkfield, with a suitable light source and grid plate
17.	Thermometer
18.	pH meter
19.	Digital Hygrometer

CS 3. Assist in Shelf Life Determination of Meat**Overview (T:24 , P:96 = 120)**

This competency standard covers the skills and knowledge required to conduct shelf life studies of meat. The trainees will be able to understand techniques in meat handling processing.

Competency Unit	Performance Criteria
CU1. Prepare meat sample for shelf life determination	P1: Perform sorting and grading of received meat cuts P2: Perform slicing and shaping P3: Maintain environmental conditions as per procedure
CU2. Examine changes in physical properties	P1: Observe color and smell of carcass and meat cuts P2: Record observed physical parameters
CU3. Dispatch meat samples and receive results	P1: Perform sampling for lab analysis P2: Tag and transfer sample in controlled conditions to lab P3: Maintain sample record P4: Collect result report from lab P5: Maintain relevant records

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- Safe Environmental condition for meat and raw material
- Meat Receiving and Inspection
- Organoleptic properties deviations
- Meat sampling & grading
- Sample handling and labelling
- Record keeping
- Primary meat processing

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard:

- Demonstrate meat sampling techniques
- Demonstrate packing and dispatch of meat samples

Tools & Equipment required:

Sr. No.	Items
1.	Grinder
2.	Mixer
3.	Wrap sheets
4.	Sample tray
5.	Trollys
6.	Sample jars
7.	Filler
8.	Capper
9.	Labeler
10.	Date coder

CS 4. Assist in Value Added Product Development**Overview (T:42 , P:168 = 210)**

This competency standard covers the skills and knowledge required to learn about value addition and product preparation process in meat industry. The trainees will be able to improve process and product quality.

Competency units	Performance criteria
CU1. Recive and inspect raw materials	P1: Inspect transport conditions P2: Check quality parameters (pH, sensory evaluation) P3: Check additives with their quality parameters
CU2. Supervise mixing	P1: Arrange the ingredients according to master recipe P2: Check equipment's functionality for mixing P3: Arrange Sorting, Cutting, Mincing, Slicing machines as per requirements P4: Perform comminution
CU3. Perform cooking process	P1: Arrange different coating as per product's needs P2: Check heat treatment as per product's need P3: Record the process specifications
CU4. Perform different stuffing and packaging techniques	P1: Provide material for stuffing and packaging process P2: Inspect molding to achieve required shape and size P3: Perform stuffing as per product needs P4: Inspect packaging as per product needs
CU5. Chill and store the meat products	P1: Check packaged products meet specification P2: Check and operate freezer / chiller specifications P3: Store the packed product as per the SOPs
CU6. Operate processing machinery	P1: Check functioning of processing machinery P2: Check cleaning and disinfection of machine / equipment P3: Operate retort for production P4: Operate mixer and homogenizer

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- materials specifications and quality requirements
- purpose and basic principles of value addition
- purpose of nutrient enhancement
- understanding of materials and sample used in value addition
- effect of process variables such as headspace and temperature on the process
- waste handling requirements and procedures
- recording requirements and procedures
- purpose and basic principles of ingredients blending, batter making
- basic principles and operation of the freezing system
- stages and changes which occur to the product during processing
- purpose and basic principles of heat treatment. This includes type and growth requirements of micro-organisms in meat and its products
- heat treatment requirements for different meat products
- the effect of heat treatment on the end product

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard:

- Prepare meat and material blend
- Prepare brine
- Operate equipments like blender, chiller, homogenizer
- Calibration of Tools and Equipment

Tools & Equipment required:

Sr. No	Item
1.	Homogenizer

2.	Blender
3.	Hot air Oven
4.	Filler
5.	Tin Trays
6.	Sterilized plates
7.	Sterilized Cans
8.	Sterilized Containers
9.	Seamer
10.	Casings
11.	Steamer

CS 5. Manage Canning Process**Overview (T:24 , P:96 = 120)**

This competency standard covers the skills and knowledge required to learn and operate the fill, and close can seam and perform the retort process. The trainees will be able to enhance canning skills.

Competency units	Performance criteria
CU1. Supervise preparatory operations	P1: Check functionality of Sorting, Cutting, Mincing, Slicing machinery P2: Check required mixing time and temperature
CU2. Supervise functioning of packaging machinery	P1: Check functioning of packaging machinery P2: Check oil levels and lubrication status P3: Check hygienic parameters
CU3. Perform retort process	P1: Check temperature, pressure, water supply and intact seals of machine P2: Check sealing integrity of cans P3: Operate retort P4: Perform random sampling for process verification P5: Check finished product specification P6: Record workplace information in the standard format

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- materials specifications and quality requirements
- stages in the filling and closing process
- purpose of hermetic sealing and types of containers suitable for use. This includes an understanding of materials and costings used in packaging

- effect of process variables such as headspace and fill temperature on the process
- waste handling requirements and procedures
- Characteristics of a good packing material
- Food grade packaging
- Knowledge of food packaging and types of packaging material
- Describe how packaging can contaminate the product.
- Enlist the properties of good food packaging

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard:

- Demonstrate functioning of Retort

Tools & Equipment required:

Sr. No	Item
1.	Can Filler
2.	Retort
3.	Sterilized Cans
4.	Seamer

CS 6. Maintain Chilling and Freezing Process**Overview: (T:18 , P:72 = 90)**

This competency standard covers the skills and knowledge required to monitor the chilling and freezing process for meat products. The trainees will be able to enhance skills to monitor the freezing process for various meat products.

Competency Units	Performance Criteria
CU1. Supervise pre-chill area	P1: Inspect the pre-chill area P2: Check hygienic shifting of product to pre-chill area P3: Maintain the hygienic condition of pre-chill area
CU2. Supervise functioning of chiller and freezer	P1: Monitor temperature of chiller and freezer P2: Monitor cleaning of chiller and freezer P3: Record data in standard format
CU3. Supervise temperature for meat products	P1: Check required product temperature and equipment conditions P2: Coordinate maintenance schedule with concerned department
CU4. Maintain Records	P1: Check temperature P2: Assist in calculating efficiency of the freezer and chiller to maintenance department P3: Report to supervisor

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standards which includes the knowledge of:

- purpose and basic principles of freezing
- stages and changes which occur during freezing
- effect of process stages on the end product
- quality characteristics and uses of frozen product
- key variables in freezing including temperature, air velocity, humidity, pressure
- microbiological considerations in freezing
- significance and method of monitoring control points within the process

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard

- Demonstrate temperature of chilled / frozen product

Tools & Equipment required:

Sr. No	DESCRIPTION
1	Filler
2	Capper
3	Labeler
4	Date coder
5	Palletizer
6	Shrinkwrap

CS 7. Apply Meat Preservation Techniques**Overview: (T:24 , P:96 = 120)**

This competency standard covers the skills and required knowledge to demonstrate the understanding of meat preservation techniques specifically meat curing and smoking processes.

Competency Units	Performance Criteria
CU1. Arrange processing equipment for curing	P1: Prepare required equipment P2: Clean processing equipment according to the manufacturer's instructions.
CU2. Prepare meat / ingredients for curing	P1: Select meat cuts according to product specifications P2: Prepare ingredients according to product specifications
CU3. Prepare brines	P1: Mix ingredients according to product specifications P2: Check strength of brine solution
CU4. Operate curing equipment	P1: Perform curing according to product specifications P2: Monitor equipment efficiency accordingly P3: Make adjustments to the process as required to achieve product specifications P4: Store product according to product specifications
CU5. Prepare meat / ingredients for smoking	P1: Select meat cuts according to product specifications P2: Prepare ingredients according to product specifications
CU6. Smoke the meat products	P1: Check correct spacing prior to loading P2: Monitor temperature of smoking chamber according to the product specifications P3: Operate meat smoker
CU7. Chill the meat products	P1: Chill product according to product specifications P2: Stack the product according to product specifications P3: Store product according to product specifications.

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standards which includes the knowledge of:

- function of various additives and ingredients
- meat curing/smoking process
- purpose and effect of brine/smoke on meat
- health regulations which apply to cure/smoke and corning of meats
- effects of curing/smoking on shelf life and taste of the product
- selection criteria for meat for the curing or smoking
- storage procedures for cured and smoked products.
- effect of moisture on casings
- procedures for cleaning processing equipment
- relevant communication and mathematical skills

Critical Evidence (s) required:

The trainee needs to produce the following critical evidence (s) to be competent in this competency standard

- prepare brine for curing
- apply brine/salting to meat cuts
- apply smoking to meat products

Tools & Equipment required:

Sr. No	DESCRIPTION
1	Automatic injector machine (Injectomat)
2	Massagers
3	Pumping equipment
4	Smoke generator
5	Smoke jet
6	Brine tanks
7	Chiller
8	Wooden boxes

CS 8. Implement Quality Management System**Overview: (T:24 , P:96 = 120)**

This competency standard covers the skills and knowledge required to implement the quality management system. The trainees will be able to demonstrate the skills and expertise required to monitor and maintain quality in the work area and able to contribute to the continual improvement of the organization.

Competency Unit	Performance Criteria
CU1. Monitor Quality in Work area	P1: Check Good Hygiene Practices (GHP) P2: Monitor Good Manufacturing Practices (GMP) P3: Identify deviations P4: Contribute to continual improvement P5: Follow instructions for corrections and corrective actions P6: Record and report deviations
CU2. Assist in Internal Audits	P1: Participate in developing an audit plan P2: Organize audit documents P3: Assist in Root Cause Analysis P4: Assist in maintaining Corrective Action / Preventive Action reports P5: Record and maintain information
CU3. Assist in meat quality policy implementation	P6: Dispatch product as per demand/order P7: Assist in implementation of meat quality & safety standards
CU4. Maintain meat quality records	P8: Assist in implementation of traceability system P9: Maintain records as legal requirements related documentation P10: Keep records and documentation

Understanding & Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

- Dimensions of product and service quality

- Difference between Quality Assurance and Quality Control
- GHP and Ritual cleansing
- GMP, PRP, and HACCP
- Conducting Sensory Evaluation
- QMS and its components
- Internal auditing, Types of Audits, CAPA reports
- Understand traceability
- Prepare documentation
- Understand and describe appropriate practices in the meat industry
- Understand records maintaining
- Prepare manufacturing, packing, processing, distribution and import records

Critical evidence(s) required:

The trainee needs to produce the following critical evidence(s) to be competent in this competency standard:

- Develop an Audit Plan
- Conduct an Adequacy Audit
- Prepare a Corrective Action Report.

Tools & Equipment required:

Sr. No	DESCRIPTION
1	Quality Control office
2	Computer
3	Printer
4	Files

CS 9. Assist in HACCP Implementation

Overview: (T:24 , P:96 = 120)

This competency standard covers the skills and knowledge required to implement principles of HACCP for production of meat products. The trainees will be able to enhance skills to implement HACCP system.

Competency units	Performance criteria
CU1. Apply Prerequisite Program	P1: Monitor Good Manufacturing practices (GMP) P2: Monitor Good hygiene practices (GHP)
CU2. Assist in conducting Hazard Analysis	P1: Assist in developing list of hazards associated with raw materials P2: Assist in developing list of hazards associated with processing P3: Assist in developing list of hazards associated with packaging and storage
CU3. Assist in determining Critical Control Points (CCPs)	P1: Assist in developing critical control points for each hazard associated with raw materials P2: Assist in developing critical control points for each hazard associated with processing P3: Assist in developing critical control points for each hazard associated with packaging and storage P4: Assist in developing acceptable levels for each point
CU4. Assist in establishing Critical Control Limits	P1: Assist in establishing critical control limits for critical control points associated with raw material P2: Assist in establishing critical limits for critical control points associated with processing P3: Assist in establishing critical limits for critical control points associated with packaging and storage
CU5. Assist in establishing monitoring procedures	P1: Assist in establishing monitoring procedures for critical control limits associated with raw materials P2: Assist in establishing monitoring procedures for critical control limits associated with processing

	P3: Assist in establishing monitoring procedures for critical control limits associated with packaging and storage
CU6. Assist in establishing corrective Actions	P1: Assist in establishing corrective actions for deviating critical control limits associated with raw materials P2: Assist in establishing corrective actions for deviating critical control limits associated with processing P3: Assist in establishing corrective actions for deviating critical control limits associated with packaging and storage
CU7. Assist in establishing verification procedures	P1: Assist in establishing verification procedures for corrective actions associated with raw materials P2: Assist in establishing verification procedures for corrective actions associated with processing P3: Assist in establishing verification procedures for corrective actions associated with packaging and storage
CU8. Assist in establishing record and documentation procedures	P1: Assist in establishing documentation procedures for processes associated with raw materials P2: Assist in establishing documentation procedures for processes associated with processing P3: Assist in establishing documentation procedures for processes associated with packaging and storage

Understanding and Knowledge:

The trainee must be able to demonstrate knowledge and understanding required to carry out tasks covered in this competency standard, which includes the knowledge of:

1. Describe History of HACCP
2. Define a hazard.
3. Describe chemical, microbiological, and physical hazards.
4. Define critical control points in the meat processing unit.
5. Define critical control limits
6. Define Operational Prerequisite Program (OPRP)
7. Describe significance of HACCP system Implementation
8. Describe Principles of HACCP

9. Describe Steps to implement HACCP system
10. Describe preventive measures to control the happening of a hazard.
11. Know about internal audits
12. Define monitoring procedures

Critical Evidence(s) Required

The candidate needs to produce the following critical evidence(s) to be competent in this competency standard:

1. Identify Hazards
2. Conduct risk assessment
3. Identify Critical Control Points (CCPs)
4. Identify PRPs

Tools and Equipment required

The tools and equipment required for this competency standard are given below:

Sr. No	Items
1.	Decision Tree
2.	Risk Assessment Tool
3.	Flow Diagram of process
4.	Quality Control office
5.	Computer
6.	Printer
7.	Files

CS 10. Create Technical Documentation**Overview:**

This unit describes the performance outcomes, skills, and knowledge required to create technical documentation that is clear to the target audience and easy to navigate.

Unit of Competency	Performance Criteria
CU1. Identify and analyze documentation requirements and client needs	P1: Consult with client to identify documentation requirements P2: Interpret and evaluate documentation requirements and confirm details with the client P3: Investigate industry and documentation standards for requirements P4: Define and document the scope of work to be produced P5: Consult with client to validate and confirm the scope of work
CU2. Design documentation	P1: Identify information requirements with reference to layout and document structure P2: Create document templates and style guides consistent with information requirements P3: Conduct a review of the system in order to understand its functionality P4: Extract content that meets information requirements according to copyright restrictions P5: Develop the structure of the technical documentation giving focus to the flow of information, style, tone and content format P6: Validate the technical documentation structure with the client
CU3. Develop documentation	P1: Write technical documentation based on the template and scope of work using the information gathered

	P2: Translate technical terminology into plain English where appropriate P3: Apply content format and style according to documentation standards and templates
CU4. Evaluate and edit documentation	P1: Submit technical documentation to the appropriate person for review P2: Gather and analyze feedback P3: Incorporate alterations into the technical documentation P4: Edit the technical documentation for technical and grammatical accuracy
CU5. Prepare documentation for publication	P1: Check that the completed technical documentation meets client requirements and scope of work P2: Submit the technical documentation to the appropriate person for approval P3: Prepare the technical documentation for publication and distribution using appropriate channels

Knowledge and Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Content features, such as clarity and readability
- Document design, web design, and usability
- Functions and features of templates and style guides
- Instructional design principles
- Organizational policies, procedures, and standards that cover document design.

Critical Evidence(s) Required

A person who demonstrates competency in this unit must be able to provide evidence of the ability to create technical documentation that is clear to the target audience and easy to navigate. The

evidence should integrate employability skills with workplace tasks and job roles and verify competency is able to be transferred to other circumstances and environments.

Demonstrated evidence is required of the ability to:

- Establish customer needs
- Design and develop technical documentation, such as system, procedures, training material and user guides, incorporating appropriate standards
- Update document with client feedback
- Prepare documentation for publication.

END OF DOCUMENT