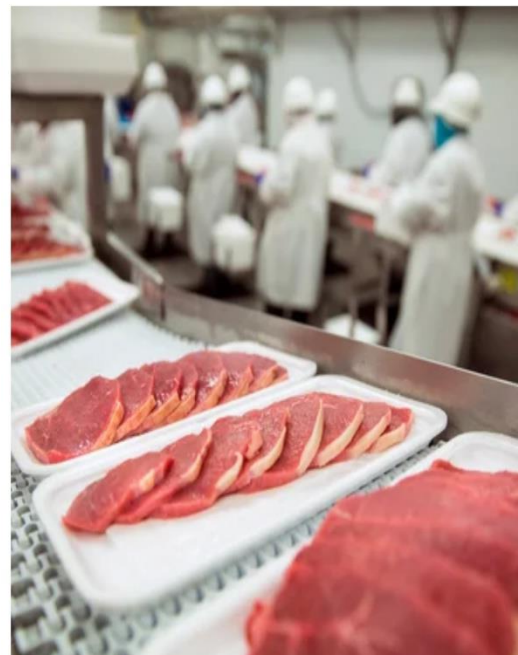


**National Competency Standards
For
Meat Technology-Level 5
(Supervisor/Assistant Line Inspector)
Level 5**



COMPETENCY STANDARDS

OF

MEAT TECHNOLOGY

Level- 5

(Supervisor / Assistant Line Inspector)

**National Vocational and Technical Training
Commission, Islamabad**

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1. INTRODUCTION

The National Skills Strategy (NSS) aims at achieving a paradigm shift from time-bound and supply led to competency-based and demand driven training in Pakistan. Competency-based training approach focuses on the demonstration of actual skills required in the workplace/industry. To achieve this strategy, NAVTTC in collaboration with GIZ is involved in the development process of Competency Based Training (CBT) program to ensure competent skilled labour in demand driven vocational trades.

Competency standards, which are benchmarks for the performance, cover the commercial aspects of a food processing and packaging technician's job. Required skills, underpinning knowledge and attitudes expected of a food processing and packaging technician have been incorporated in these competency standards, while setting standards for the performance of a food processing and packaging technician. The NAVTTC endorsed National Competency Standards (NSCs) for food processing and packaging Technician will provide the basis for further development of curricula, assessment materials and instructional materials that will support implementation of competency-based training and assessment at public and private institutional levels across the country. The packaging of the competency standards is as under:

Globally, demand for meat and meat products is on rise especially in Asian countries like Pakistan. Pakistan is an agricultural Islamic country; its economy mostly depends upon agricultural produce. Livestock sector is growing rapidly in Pakistan and export of Halal meat is increasing resulting in prosperity of poor areas of country. Food hygiene awareness is greatly enhancing in the country and all over the world. Hence instead of old conventional way now people have started preferring hygienically slaughtered Halal meat and poultry. Keeping in view the need of the market, and to give importance to the livestock economy sector, the meat technology course is designed to produce skilled butchers having knowledge of hygiene, nutrition, quality assurance and processing techniques. The trained pass outs will contribute nationally and internationally thus earning valuable foreign exchange.

2. PURPOSE OF THE TRAINING PROGRAM.

In this training program trainee will learn and acquire specialized knowledge and particular skills required to function as supervisor/Assistant line inspector in meat processing industry. The supervisor will be responsible to ensure process and procedures involved in animal handling, slaughtering, processing, preservation, control hazards, ensure safety and hygiene as well as safe meat packaging of products as per industry SOPs. The supervisor/Assistant line inspector in meat industry will be involved to maintain personal safety, maintenance of equipment and ensure quality work. The specific objectives of this training course are as under:

- Improve the overall quality of training delivery and setting national benchmarks for training of workers in the country
- Provide flexible pathways and progressions to learners enabling them to receive relevant, up-to-date and recent skills
- Provide basis for competency-based assessment which is recognized and accepted by employers
- Establish a standardized and sustainable system of training for supervisor/Assistant line inspector at regional/national/international levels

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 – 5	
Code	Description
000000000	National Vocational Certificate Level – 5 (Supervisor/Assistant Line Inspector) in Meat Processing

4. QUALIFICATIONS DEVELOPMENT COMMITTEE

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

S#	Expert Name	Designation / Department
1.	Mr. Muhammad Aasim	Assistant Director, NAVTTC Coordinator
2.	Mr. Muhammad Nasir Khan	Ex DD NAVTTC (SS&C Wing), 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 Manzoor	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.	Mrs. 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. QUALIFICATIONS VALIDATION COMMITTEE

The following members participated in qualification review and validation workshop from 21 – 25 November, 2022 held at Park Lane Hotel, Lahore:

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. Iahtisham-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

The entry requirement in Level – 5 NVQ is Level 4 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-5 (120 Credits) [40:60]

Supervisor / Assistant Line Inspector

1. Supervise processing and safety operations in meat industry
2. Prepare meat sausages
3. Monitor installation and maintenance of equipment
4. Ensure implementation of cleanliness and hygiene practices in meat processing operations
5. Implement and coordinate legislations for production, processing and storage of meat
6. Monitor proper transportation for meat/ meat products
7. Conduct meat sampling
8. Implement HACCP
9. Implement Halal Food Management System (HFMS)
10. Apply project human resource management
11. Develop entrepreneurial skills

9. SUMMARY OF COMPETENCY STANDARDS

Sr.	Competency Standards	Estimated Contact Hours			Total Credit Hours	Category
		Theory Hours	Practical Hours	Total		
1.	Supervise processing and safety operations in meat industry	32	48	80	8	Core
2.	Prepare meat sausages	32	48	80	8	Core
3.	Monitor Installation and Maintenance of Equipment	32	48	80	8	Core
4.	Ensure Implementation of Cleanliness and Hygiene Practices in Meat Processing Operations	80	120	200	20	Core
5.	Implement and coordinate legislations for production, processing and storage of meat	64	96	160	16	Core
6.	Monitor Proper Transportation for Meat / Meat Products	64	96	160	16	Core
7.	Conduct Meat Sampling	48	72	120	12	Core
8.	Implement HACCP	48	72	120	12	Core
9.	Implement Halal Food Management System (HFMS)	29	39	68	6.8	Core
10.	Apply Project Human Resource Management	24	36	60	6	Generic
11.	Develop Entrepreneurial Skills	24	36	60	6	Generic
12.	Implement Green Skills at Workplace	03	09	12	1.2	Generic
Total		480	720	1200	120	

0721MT01 Supervise Processing and Safety Operations in Meat Industry
Overview:

This Competency Standard covers competencies required to supervise processing and safety operations in meat industry which involve safe handling of animals/birds at processing site, selection of appropriate and healthy animals/birds as per industry requirements, maintain and provide required tools and equipment, monitor halal slaughtering protocols and carcass quality, Monitor safe storage conditions and dispatch of meat and meat products as well as resolve problems related to workers and quality in day to day operations and manage appropriate record keeping to fulfill suppliers/consumer demand

Competency Unit	Performance Criteria
CU1. Monitor safe handling of animals/birds at processing site	P1. Check animal welfare and handling requirements of animals/birds P2. Supervise physical Inspection as per specification P3. Supervise live halal birds/animals at receiving P4. Supervise feed and water for the live animals P5. Manage records and documentation
CU2. Supervise selection of healthy animals/birds	P1. Confirm segregation of animals as per requirement P2. Verify Quarantine abnormal birds/animals P3. Verify the off feeding and off watering of animals P4. Inform to veterinarian in case of any abnormality
CU3. Supervise provision of tools and equipment for meat and meat products	P1. Assign specific tasks to the work teams P2. Verify the provision of required accessories and tools to team P3. Manage and rectify equipment faults
CU4. Monitor halal slaughtering protocols and carcass quality	P1. Check direction of animals/birds towards Qibla P2. Recitation of TASMIYA P3. Verify cutting of Trachea, Esophagus and both the Carotid arteries and Juglar veins P4. Supervise bleeding of birds/animals P5. Ensure prevention of malpractices during slaughter
CU5. Monitor storage and dispatch of meat and meat products	P1. Check proper stacking of carcass and meat cuts in chiller and freezer P2. Inspect the packaging during storage P3. Monitor the temperature of storage area and dispatch vehicles as per instructions P4. Verify the expiry date on products during dispatch P5. Manage relevant records
CU6. Resolve problems related to workers and quality in day-to-day operations	P1. Manage self and staff P2. Provide leadership in workplace for problem solving P3. Participate in, lead, and facilitate teamwork P4. Lead and develop others

	P5. Train small groups
CU7. Manage appropriate record keeping fulfilling suppliers/consumer demand	P1. Operate a computer to produce simple documents P2. Manage workplace information P3. Manage operations to achieve planned outcomes P4. Communicate with team regarding demand P5. Train small groups

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Monitor safe handling of animals/birds
- Ensure selection of appropriate and healthy animals
- Maintain and provide required tools and equipment
- Monitor halal slaughtering protocols
- Monitor safe storage conditions
- Resolve problems related to workers and quality
- Manage record keeping

Critical Evidence(s) Required

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

- How to ensure halal slaughtering?
- How to maintain record keeping?

Tools and Equipment required

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

Sr. No	Items
1.	Ritual Slaughtering box
2.	Knives Bonner+ Stake
3.	Choppers
4.	Steel sharpener (file)
5.	Mince machine 5/8/12 mm
6.	Cutler machine
7.	Chopping board (wooden)
8.	Chopping board (Teflon food grade)
9.	Safety gloves (steel made)

10.	Mask Disposable
11.	Net Caps Disposable
12.	Uniform Hats
13.	Steel toe shoes
14.	Slicer machine
15.	Laser temperature gauge /Probe
16.	Hooks

0721MT02 Prepare Meat Sausages
Overview:

This Competency Standard covers competencies required to prepare meat sausages involving selection and safe handling of different meat types at processing site, selection of appropriate ingredients and casings as per product's requirements. In addition, maintain and provide required tools and equipment for mincing, mixing, stuffing and cooking of the product. Furthermore, perform packaging and storage of prepared product as per respective specifications.

Competency Unit	Performance Criteria
1. Prepare meat, ingredients and casings according to sausages specification	P1. Select type of meat as per sausage type P2. Prepare ingredients as per recipe P3. Select appropriate casings as per product's specifications
2. Supervise mincing of meat	P1. Monitor preparation of mincer P2. Manage meat mincing as per requirement P3. Inspect quality of minced meat
3. Operate relevant equipment(s) for sausage preparation	P1. Prepare meat sausage equipment(s) P2. Operate the bowl chopper and mixer P3. Operate stuffer
4. Supervise cooking and packaging of sausages	P1. Monitor cooking equipment P2. Manage cooking operation for sausage development P3. Supervise cooling and packaging of cooked product
5. Manage product storage and monitor chilling process	P1. Check the storage specification as per product's need P2. Manage storage room P3. Supervise product storage as per specifications

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Monitor safe handling of meat
- Ensure selection of appropriate ingredients
- Maintain and provide required tools and equipment
- Maintain good hygienic practices during food handling
- Monitor safe storage conditions
- Resolve problems related to workers and quality
- Manage record keeping

Critical Evidence(s) Required

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

- How to prepare meat sausages as per product's specifications?
- How to ensure safe storage conditions for prepared sausages?

Tools and Equipment required

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

Sr. No	Items
1.	Sausage Casings
2.	Knives
3.	Bowl chopper
4.	Mince machine 5/8/12 mm
5.	Chopping board (wooden)
6.	Chopping board (Teflon food grade)
7.	Safety gloves (steel made)
8.	Mask Disposable
9.	Net Caps Disposable
10.	PPEs
11.	Cooking Oven
12.	Packaging machine
13.	Laser temperature gauge /Probe
14.	Stuffer

0721MT03 Monitor Installation and Maintenance of Equipment

Overview:

This Competency Standard identifies the competencies for monitoring the new installation, repairing, and maintenance of different types of equipment. The trainees will understand essential equipment present in the red and white meat processing plants, their installation requirements, allied components, maintenance, and repair needs with back plans. It will further cover the scheduled maintenance plan, parameters to be checked like pressure, oil levels, grease/lubricants, wirings, backup plan during emergencies, and backlogging of important components to be dealt with such types of situations.

Competency Unit	Performance Criteria
CU1. Inspect different pre-working Equipment	P1. Manage inspection schedule of machines P2. Monitor smooth working requirements of equipment P3. Verify precautionary measures to operate sensitive equipment P4. Maintain sufficient space for meat processing and storage P5. Inspect the cleanliness of contact surfaces P6. Manage adequate mechanical ventilation to effectively remove fumes, smoke, steams, and vapors from premises.
CU2. Supervise post working inspection of equipment	P1. Inspect burnt, sparked, oiled surfaces P2. Report broken or damaged equipment to the concerned P3. Manage damaged parts for smooth functioning P4. Verify record keeping of changed or repaired equipments
CU3. Manage working of sensitive and old processing equipments	P1. Supervise working of sensitive and old equipments P2. Manage the continuous monitoring of such machines P3. Monitor log record for rectification protocols
CU4. Implement emergency preparedness plan	P1. Coordinate required resources with the management P2. Monitor every worker is well communicated with this plan P3. Check availability of suitable equipment and their timely accessibility plan
CU5. Supervise backup of sensitive equipment/components	P1. Manage specifications, records, and availability status P2. Arrange the work order/demand notice P3. Manage store, transport, and maintenance staff P4. Ensure the suitability of components in case different models are working in the facility P5. Safeguard documents and records appropriately

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Working mechanism of in-house stores and release time frame.
- Working mechanism and specification of different equipments/machines.
- Suitable required skills and call up mechanism

- Types of emergencies and required tackling steps
- Differentiation in sensitive and ridged machines for handling

Critical Evidence(s) Required

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

- Demonstrate Working of machines and troubleshooting

Tools and Equipment required

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

Sr. No	Items
1.	Ritual killing box
2.	Knives Bonner+ Stake
3.	Choppers
4.	Steel sharpener (file)
5.	Mince machine 5/8/12 mm
6.	Cutler machine
7.	Chopping board (wooden)
8.	Chopping board (Teflon food grade)
9.	Safety gloves (steel made)
10.	Mask Disposable
11.	Net Caps Disposable
12.	Uniform Hats
13.	Steel toe shoes

0721MT04	Ensure Implementation of Cleanliness and Hygiene Practices in Meat Processing Operations
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Overview:

This Competency Standard identifies the competencies for suitable technique for cleaning of different surfaces, required accessories, sensitive portions of the facility, chemicals, and monitoring protocols and hygiene and allied aspects. The trainees will understand cleaning systems in different operations, including procedures and documentation for cleaning, handling and precautionary measures, importance of hygiene and its impact on the product quality and shelf life. It will further cover accessories required to maintain cleanliness and personal/product hygiene, preventive and corrective actions for ensuring the deviation.

Competency Unit	Performance Criteria
CU1. Implement good hygiene practices in meat and meat products processing	P1. Manage suitable cleaning agents P2. Monitor adequate cleaning and/or disinfection of surfaces P3. Manage mechanism against the accumulation of dirt, toxic materials, food debris and the formation of condensation P4. Monitor cleaning of infrastructure of food premises as per food hygiene protocol
CU2. Inspect Basic GHP requirements regarding personal hygiene	P1. Monitor hand washing and disinfection procedures before entering production P2. Report to management in the case of illness P3. Check wearing personal protective Equipment (PPE) as per SOPs regarding hygienic measures
CU3. Inspect basic GHP requirements to production, quality and process control	P1. Manage suitable cleaning agents P2. Monitor adequate cleaning and/or disinfection surfaces P3. Manage mechanism against the accumulation of dirt, toxic materials, food debris and the formation of condensation P4. Monitor cleaning of infrastructure of food premises as per food hygiene protocol
CU4. Supervise basic GMP requirements in regard to cleaning and sanitation	P1. Inspect availability of required equipments, chemicals and water supply P2. Implement in house relevant unit cleaning and sanitation schedule and SOPs P3. Maintain record keeping associated with the sanitation procedure
CU5. Apply basic GHP requirements in regard to measures for prevention of	P1. Inspect availability of required equipments, chemicals and water supply P2. Implement in house relevant unit cleaning and sanitation schedule and SOPs

cross contamination	P3. Maintain record keeping associated with the sanitation procedure
CU6. Apply basic GHP requirements in regard to Pest Management	P1. Inspect segregation of area according to hygiene requirement (Zoning) with color coding uniforms, equipment and accessories P2. Control workers movement in different areas to control cross contamination P3. Inspect working of drainage systems to avoid spill over in all areas
CU7. Inspect stock of chemicals in the store for whole described duration	P1. Identify prone areas and target pest related to workplace area P2. Supervise preventive measures in regard to pest entry in food processing area P3. Monitor functioning of installed devices (Insect-o-cutors, Bait Station, Glue Boards, Straws, Cages) P4. Clean and maintain monitoring devices P5. Maintain record and report trend for alternative action
CU8. Supervise working of decontamination equipment and chemicals	P1. Inspect stock of chemicals, their expiry, and PPEs P2. Implement the manufacturer usage instructions in the facility
CU9. Monitor cleaning efficacy	P1. Implement the inspection and maintenance schedule P2. Maintain the water supply to relevant equipment and monitor their functioning at required temperature P3. Implementation of SOPs regarding contact time and washing
CU10. Manage the documentation and records for cleaning and sanitation	P1. Coordinate with relevant staff for collection of cleaning and sanitation samples P2. Manage the delivery of samples to the designated lab P3. Interpret laboratory control records P4. Implementation of the lab report results and suggested modification in protocol

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Implement good hygiene practices
- Cleaning and sanitation in meat processing
- Apply requirements about measures for prevention of cross contamination
- Apply basic GHP requirements about Pest Management
- Ensuring stock of chemicals
- Ensure working of decontamination equipments and chemicals
- Monitoring and validity of cleaning efficacy
- Manage documentation and records

Critical Evidence(s) Required

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

- Draw layout of facility for pest management plan
- Evaluate validity of cleaning efficacy
- How to manage documentation and records?

Tools and Equipment required

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

Sr. No	Items
1.	Chopping board (wooden)
2.	Chopping board (Teflon food grade)
3.	Safety gloves (steel made)
4.	Mask Disposable
5.	Net Caps Disposable
6.	Uniform Hats
7.	Steel toe shoes
8.	Slicer machine
9.	Laser temperature gauge /Probe
10.	Hooks
11.	Hanging bars

0721MT05 Implement and Coordinate Legislations for Production, Processing and Storage of Meat
Overview:

This Competency Standard identifies the competencies for local and international legislation, certifications and standards guidelines commonly used to implement, manage, and improve quality standard programs in food processing. The trainees will understand relevant local and federal laws implemented on different segments of the meat supply chain particularly at the processing stage. It will further cover implementation of these legislative laws at processing points.

Competency Unit	Performance Criteria
CU1. Implement legal and framework standards	P1. Coordinate with QA department for information about regulations P2. Implement relevant section of regulation in the designated areas P3. Manage regular communication with staff for implementation P4. Inspect safety rules and regulations for the food processing industry
CU2. Apply legal to framework related international regulations	P1. Coordinate with QA department for information about international regulations and requirements P2. Inspect regular random sampling for compliance to regulations P3. Implementation of regulations according to consignment to the designated country P4. Supervise provision of legal documentation with the respective country consignment
CU3. Coordinate different stakeholders for smooth conduction of meat processing operations	P1. Manage the reception of requirement orders from the concerned department P2. Ensure provision of essentials (services or equipments or accessories) for every step of processing with different relevant departments P3. Ensure quality of essentials according to requirements P4. Communicate with stakeholders for smooth execution of customer requirement
CU4. Implement slaughtering and food legislation for industry	P1. Coordinate with management for concerned mandatory laws and regulations P2. Communicate with staff on these requirements P3. Manage the traceability and other processes required documentation

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Understand and apply legal framework related to regulations
- Coordinate different stakeholders for conduction of processing operations
- Implement slaughtering and food legislation in industry

Critical Evidence(s) Required

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

- How to ensure implementation of legal framework in meat industry?
- Draw tree diagram of legal framework for meat industry

0721MT06 Monitor Proper Transportation for Meat / Meat Products
Overview:

This Competency Standard covers the competencies required to apply skills and knowledge to ensure proper transportation of meat as per approved guidelines and procedures. Trainees will be expected to ensure transportation of meat and meat products as per standard procedure.

Competency Units	Performance Criterion
CU1. Implement required conditions for transportation	P1. Monitor availability, cleaning and disinfection of reefer P2. Monitor required reefer temperature to transport meat P3. Manage proper packaging at loading P4. Monitor meat temperature at loading P5. Manage proper meat stacking at loading
CU2. Manage proper transportation documentation	P1. Manage documentation according to consignment requirement P2. Provide certificate of analysis (COA) of the batch/lot with supply P3. Provide material safety data sheet (MSDS) of lot/batch with supply P4. Record destination area of supply

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Explain transportation mode.
- Describe types of transportation machines.
- Explain contamination during transport.
- Describe temperature requirement during transportation.

Critical Evidence(s) Required

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

- Supervise temperature recording of meat/meat product at loading
- Supervise temperature recording of reefer at loading

Tools and Equipment required

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

Sr. No	Items
1.	Containers
2.	Tape sealers
3.	Leak Tester
4.	Pressure Tester
5.	Wrapper
6.	Freezer

0721MT07 Conduct Meat Sampling
Overview:

This Competency Standard covers the competencies required to apply skills and knowledge to conduct proper meat sampling as per approved guidelines and procedures. Trainees will be expected to ensure transportation of meat and meat products as per standard procedure.

Competency Units	Performance Criterion
CU1. Arrange Sampling Tools	P1: Manage availability of PPEs and tools P2: Manage availability of swabs and sterilized containers P3: Manage availability of suitable media for air sampling
CU2. Collect meat sample	P1: Monitor implementation of sampling plan P2: Manage sampling in hygienic manner
CU3. Dispatch meat sample	P1: Monitor coding and labelling of sample P2: Coordinate with the concerned lab P3: Maintain documentation P4: Manage safe and hygienic delivery of samples
CU4. Collect result for implementation	P1: Receive test report at designated time P2: Report to management in case of deviations P3: Implement decision received from the management

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Explain PPEs
- Describe Sterilization
- Explain media for sampling.
- Describe Sampling plan.
- Explain labelling requirements for meat samples.

Critical Evidence(s) Required

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

- Demonstrate meat sampling

Tools and Equipment required

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

Sr. No	Items
1.	Sterile bags
2.	Tape sealers
3.	Wrapper
4.	Freezer

0721MT08 Implement HACCP**Overview:**

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. Monitor Prerequisite Program	P1: Verify Good hygiene practices P2: Verify Good Manufacturing practices
CU2. Conduct Hazard Analysis	P1: Develop list of hazards associated with raw material P2: Develop list of hazards associated with processing P3: Develop list of hazards associated with packaging and storage P4: Identify significant risks
CU3. Determine Critical Control Points (CCPs)	P1: Develop critical control points for each hazards associated with raw materials P2: Develop critical control points for each hazards associated with raw materials associated with processing P3: Develop critical control points for each hazards associated with packaging and storage P4: Monitor acceptable levels for each point
CU4. Establish Critical Limits	P1: Verify critical limits for critical control points associated with raw material P2: Verify critical limits for critical control points associated with processing P3: Verify critical limits for critical control points associated with packaging and storage
CU5. Develop monitoring procedures	P1: Establish monitoring procedures for critical control limits associated with raw materials P2: Establish monitoring procedures for critical control limits associated with processing P3: Establish monitoring procedures for critical control limits associated with packaging and storage
CU6. Implement corrective Actions	P1: Monitor corrective actions for deviating critical control limits associated with raw materials

	P2: Monitor corrective actions for deviating critical control limits associated with processing P3: Monitor corrective actions for deviating critical control limits associated with packaging and storage
CU7. Establish verification procedures	P1: Monitor verification procedures for corrective actions associated with raw materials P2: Monitor verification procedures for corrective actions associated with processing P3: Monitor verification procedures for corrective actions associated with packaging and storage
CU8. Establish record and documentation procedures	P1: Monitor documentation procedures for processes associated with raw materials P2: Monitor documentation procedures for processes associated with processing P3: Monitor 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. Draw Process Flow Diagram
2. Analyze Hazards
3. Conduct risk assessment

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

0721MT09 Implement Halal Food Management System (HFMS)
Overview:

This Competency Standard covers the competencies required to implement Halal Food Management System (HFMS), based on Pakistan Halal Standard PS 3733. After completing this standard, the learner will be able to understand the basics of Halal standard PS 3733 related to poultry and livestock sector.

Competency Unit	Performance Criteria
CU1. Monitor implementation of PS 3733 for human resource	P1. Supervise slaughterer competency P2. Supervise slaughtering process P3. Supervise Personal hygiene and food safety
CU2. Monitor implementation of PS 3733 for materials	P1. Supervise valid halal certificates for required materials P2. Supervise availability of Halal material (carcass cloth, stamping ink and ingredients)

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to view everything from Halal point of view like:

- Understand slaughterer requirements mentioned in PS3733.
- Understand slaughtering requirements mentioned in PS3733.
- Understanding of Halal Control Points (HCP).
- Know about basics of halal material used in processing.
- Understand the terms like Najs, Makrooh, Halal.

Critical Evidence(s) Required

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

- Demonstrate slaughterer competency
- Draw a layout of the HCPs involved in the general flow diagram of primary processing abattoir.

Tools and Equipment required

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

Sr. No	Items
1.	PS 3733 standard copy
2.	HCCP Flow diagram

00000000 Apply Project Human Resource Management
Overview:

This Competency Standard covers the competencies required to learn module regarding human resource management that include in assist in determining human resource requirements, contribute to establishing and maintaining productive team relationships, assist with human resource monitoring and contribute to evaluating human resource practices. After completing this module, the learner will be able to plan human resource management, estimate adequate human resource, acquiring resources and develop & manage team member's safety, leading towards processing of safe and quality of meat

Competency Unit	Performance Criteria
CU1. Assist in determining human resource requirements	P1: Analyze work breakdown structure to determine human resource requirements P2: Prepare a skills analysis of project personnel against project task requirements P3: Assist in assigning responsibilities for achieving project deliverables
CU2. Contribute to establishing and maintaining productive team relationships	P1: Actively seek views and opinions of team members during task planning and implementation P2: Promote cooperation and effective activities, goals and relationships within team P3: Communicate with others using styles and methods appropriate to organizational standards, group expectations and desired outcomes P4: Communicate information and ideas to others in a logical, concise and understandable manner P5: Regularly seek feedback on nature and quality of work relationships, and use feedback as basis for own improvement and development
CU3. Assist with human resource monitoring	P1: Monitor work of project personnel against assigned roles and responsibilities within delegated authority levels P2: Monitor and control actual effort against project plan P3: Review skill levels against allocated tasks and recommend solutions, where required, to others P4: Advise others within delegated authority when assigned responsibilities are not met by project personnel P5: Undertake work in a multi-disciplinary environment according to established human resource management practices, plans, guidelines and procedures P6: Resolve conflict within delegated authority according to agreed dispute-resolution processes

	P7: Assist in offering human resource development opportunities to individuals with skill gaps
CU4. Contribute to evaluating human resource practices	P1: Contribute to assessing effectiveness of project human resources management P2: Document lessons learned to support continuous improvement processes

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore he/she must be able to:

- Resource requirements
- Basis of estimates
- Resource breakdown structure
- Multi criteria human resource selection analysis (availability, cost, experience, ability, knowledge, skills & attitude)
- Explain 5 steps of team development (Forming, Storming, Norming, Performing and Adjourning)
- Off job and On job trainings, Empowerment, job delegation and job rotation
- Demonstrate team meetings to understand cultural differences and getting feedback
- Team performance assessments
- Conflict management (Avoid, Smooth/Accommodate, Compromise/Reconcile, Force/Direct and Collaborative/Problem Solve)

Critical Evidence(s) Required

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

- Resource requirements
- Basis of estimates
- Resource breakdown structure
- Multi criteria human resource selection analysis (availability, cost, experience, ability, knowledge, skills & attitude)
- Explain 5 steps of team development (Forming, Storming, Norming, Performing and Adjourning)

Tools and Equipment required

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

Sr. No	Items
1.	Internet
2.	Laptop/Computer
3.	White board

4.	Projector screen
5.	Multimedia projector
6.	Internet

00000000 Develop Entrepreneurial Skills
Overview:

This Competency Standard covers the competencies required to learn module regarding development of entrepreneurial skills involving develop a business plan, making access for the market as well as human resource management. After completing this module, the learner will be able to locate for market, management, estimate adequate market requirements, demand for safe meat and meat products demand and supply

Competency Unit	Performance Criteria
CU1. Develop a business plan	P1. Conduct a market survey to collect following information • Business Model • Financials • Equipment Estimation • Revenue Generation Sources • Marketing strategy • Market Trends • Overall Expenses P2. Select the best option in terms of cost, service, quality, sales, operational expenses P3. Compile the information collected through the market survey, in the business plan format
CU2. Develop marketing plan	P1. Make a marketing plan for the service products, price, placement, promotion, people, packaging and positioning P2. Include the information of marketing plan in the business plan
CU3. Develop communication skills for sales and marketing	P1. Use effective communication skills P2. Use different modes of communication to communicate effectively e.g.: presentation, speaking, writing, listening, visual representation, reading, social media etc. P3. Use specific business terms used in the market

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Templates of business plan
- Understanding of how to prepare business plan
- Enlist specific business terms used in the industry
- Demonstrate Make or Buy analysis
- 7Ps for mass marketing (Product, Price, Place, Promotion, People, Packaging and Positioning)
- 4Cs for niche marketing (Cost, Communication, Convenience and Customer)

- Explanation 7Cs of business communication (Clear, Correct, Complete, Concise, Concreate, Coherent & Courteous)
- Demonstrate the effective elaboration of product offering

Critical Evidence(s) Required

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

- Templates of business plan
- Understanding of how to prepare business plan
- Enlist specific business terms used in the industry
- Demonstrate Make or Buy analysis

Tools and Equipment required

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

Sr. No	Items
7.	Internet
8.	Laptop/Computer
9.	White board
10.	Projector screen
11.	Multimedia projector
12.	Internet

00000000 Implement Green Skills at Workplace

Objective: This competency standard covers skills and knowledge required to reduce energy losses, waste management and utilization of low value meat cuts in product development. After this competency standard, trainee will be able to develop knowledge and competence in an efficient way for raw materials, resources, power management and waste management.

Learning Unit	Learning Outcomes
CU1. Use power management techniques	P1: Use both sides of paper for printing P2: Reduce the brightness of screen, saving battery, which in turn helps in saving the power, and most importantly turning off the device when not in use. P3: The use of LED and LCD monitors in place of CRTs P4: Select blend of group policies, Windows in-built sleep function and various software systems
CU2. Use low value raw meat for value added products and waste management	P1: Use chilling equipment's resulting lower wastage of meat P2: Use low value meat in development of value-added meat products P3: Improve workplace premises for waste management considering safety and quality P4: Rational use of water for processing and cleaning
CU3. Use efficient resource management	P1: Turn off computer when not using P2: Switch off the external devices when not needed P3: Facilitate energy management P4: Use devices which consume low energy P5: Use handheld equipment rather than PCs for basic tasks

Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- Templates of business plan
- Understanding of how to prepare business plan
- Enlist specific business terms used in the industry
- Demonstrate Make or Buy analysis
- 7Ps for mass marketing (Product, Price, Place, Promotion, People, Packaging and Positioning)
- 4Cs for niche marketing (Cost, Communication, Convenience and Customer)
- Explanation 7Cs of business communication (Clear, Correct, Complete, Concise, Concreate, Coherent & Courteous)
- Demonstrate the effective elaboration of product offering

Critical Evidence(s) Required

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

- Templates of business plan
- Understanding of how to prepare business plan
- Enlist specific business terms used in the industry
- Demonstrate Make or Buy analysis

Tools and Equipment required

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

Sr. No	Items
13.	Internet
14.	Laptop/Computer
15.	White board
16.	Projector screen
17.	Multimedia projector
18.	Internet

LIST OF TOOL AND EQUIPMENT		
SR.NO	Tools	Required items
1.	Ritual killing box	
2.	Knives Bonner+ Stake	
3.	Choppers	
4.	Steel sharpener (file)	
5.	Mince machine 5/8/12 mm	
6.	Cutler machine	
7.	Chopping board (wooden)	
8.	Chopping board (Teflon food grade)	
9.	Safety gloves (steel made)	
10.	Mask Disposable	
11.	Net Caps Disposable	
12.	Uniform Hats	
13.	Steel toe shoes	
14.	Slicer machine	
15.	Laser temperature gauge /Probe	
16.	Hooks	
17.	Hanging bars	
18.	Trays	
19.	Trolleys	
20.	Plastic Pallets	
21.	Dust bin	
22.	Weighting Scale (capacity up to 15 kg)	
23.	Weighting Scale (capacity minimum 200 kg and above)	
24.	Tray wrapping machine	
25.	Shelves	
26.	Shrink wrap role	
27.	Horn and hock joint cutter	

2nd list**CATEGORY -1: TOOLS & EQUIPMENT**

Sr. No.	DESCRIPTION
1.	Ritual killing box
2.	Knives Bonner+ Stake
3.	Choppers
4.	Steel sharpener (file)
5.	Mince machine 5/8/12 mm
6.	Cutler machine
7.	Chopping board (wooden)
8.	Chopping board (Teflon food grade)
9.	Safety gloves (steel made)
10.	Mask Disposable
11.	Net Caps Disposable
12.	Uniform Hats
13.	Steel toe shoes
14.	Slicer machine
15.	Laser temperature gauge /Probe
16.	Hooks
17.	Hanging bars
18.	Trays
19.	Trolleys
20.	Plastic Pallets
21.	Dust bin
22.	Weighting Scale (capacity up to 15 kg)
23.	Weighting Scale (capacity minimum 200 kg and above)
24.	Tray wrapping machine
25.	Shelves
26.	Shrink wrap role
27.	Horn and hock joint cutter