

**THE UNITED REPUBLIC OF TANZANIA**  
**MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY**



**MEAT PROCESSING TECHNOLOGY SYLLABUS FOR ORDINARY SECONDARY  
EDUCATION VOCATIONAL STREAM FORM I-IV**

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## **Abbreviations and Acronyms**

CBET	Competence Based Education and Training
VETA	Vocational Education and Training Authority
TIE	Tanzania Institute of Education
ICT	Information and Communication Technology
NGO's	Non-Government Organizations
CA	Continuous Assessments
TCHF	Tanzania Code of Hygiene and Food
PSE	Pale and Soft Exudative
SOP's	Standard Operational Procedures
DFD	Dry Firm and Dark
NECTA	National Examinations Council of Tanzania
FTNA	Form Two National Assessment
PPRA	Public Procurement Regulatory Authority
NEST	National e-Procurement System
WIP	Working in Progress

## **Definition of Key Terms**

**Assessment:** The process of collecting evidence and making judgments on whether competency has been achieved, or whether specific skills and knowledge have been achieved that will lead to the attainment of competency.

**Circumstantial knowledge:** Detailed knowledge, which allows the decision-making in regard to different circumstances and cross cutting issues.

**Competence:** The ability to use knowledge, understanding, practical and thinking skills to perform effectively to the workplace standards required in employment.

**Element:** A sub- unit (step), which reflects learning sequence with the aim of achieving broad learning objectives of a unit.

**Standard:** A set of statements, which if proved true under working conditions, means that an individual is meeting an expected level and type of performance.

**Underpinning Knowledge:** This is essential knowledge needed in order to demonstrate competences that are associated in performing a given task.

**Unit:** A statement of broad learning objectives, which prescribe the requirements of a standard in form of practical skills, knowledge and appropriate attitudes.

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For and on behalf of:

**Vocational Education and Training Authority**



CPA. Anthony M. Kasore  
**Director General**

## **1.0 Introduction**

Meat Processing Technology is one of the occupations taught in the Ordinary Secondary Education Vocational Stream. Learning Meat Processing Technology is essential because Tanzania is among of African countries with large population of livestock. These resources can be leveraged to support the country's economy. By teaching Meat Processing Technology, students will develop practical skills that will enable them to be engaged in processing and producing different value-added products, such as meat cuts, sausages, ham, bacon, edible slaughter by-products, and quality hides/skins. Also, graduates from this occupation can engage themselves in preparing ingredients for making animal feeds and managing feedlots. This fosters local industries and creates opportunities for exporting meat and meat products. In return, this will foster economic development, and create jobs.

Upon completion of the program, students will be competent in both knowledge and skills of meat processing, from identifying and selection of slaughter animals to advanced manufacturing procedures. They will be capable of operating meat processing tools, equipment and machinery, producing quality meat, meat products, and implementing sustainable practices in the industry, all while adhering to safety regulations. Additionally, students will be equipped with the business skills necessary for managing livestock trade and meat processing enterprises, ensuring high standards of quality and innovation in all aspects of the meat processing industry.

A graduate in this field can manage self-employment or find employment in both Government and private sectors including: ministries/departments; training institutions; research institutions; projects; small, medium and large meat processing facilities; and Non-Governmental Organizations (NGOs).

The Meat Processing Technology Syllabus is designed to guide the teaching and learning of Meat Processing Technology at Ordinary Secondary Education Form I-IV Vocational Stream in the United Republic of Tanzania. The syllabus interprets the competences a student needs to develop while learning Meat Processing Technology. It contains valuable information that will enable teachers to effectively plan their teaching process and help students to develop the intended competences.

## **2.0 Main Objectives of Education in Tanzania**

The main objectives of education in Tanzania are to enable every Tanzanian to:

- (a) Develop and improve his or her personality so that he or she values himself or herself and develops self-confidence;
- (b) Respect the culture, traditions, norms and customs of Tanzania; cultural differences; dignity; human rights; attitudes and inclusive actions;
- (c) Advance knowledge and apply science and technology, creativity, critical thinking, innovation, cooperation, communication and positive attitudes for his or her own development and the sustainable development of the nation and the world at large;
- (d) Understand and protect national values, including dignity, patriotism, integrity, unity, transparency, honesty, accountability and the national language;
- (e) develop life and work-related skills to increase efficiency in everyday life;

- (f) Develop a habit of loving and valuing work to increase productivity and efficiency in production and service provision;
- (g) Identify and consider cross-cutting issues, including the health and well-being of the society, gender equality, as well as the management and sustainable conservation of the environment; and
- (h) Develop national and international cooperation, peace and justice per the Constitution of the United Republic of Tanzania and international conventions.

### **3.0 General Competencies for Ordinary Secondary Education Vocational Stream**

The general competences for Ordinary Secondary Education, Form 1–IV, Vocational Education stream are to:

- (a) Apply the knowledge, skills, and attitudes the student developed in the primary school stage to increase his/her understanding of technical skills;
- (b) Apply technical skills in designing, inventing, and making various things to cope with life and solve challenges in society;
- (c) Appreciate citizenship and national virtues;
- (d) Use language skills;
- (e) Demonstrate self-confidence in learning in various fields, including science and technology, technical knowledge and technical skills;
- (f) Apply technical knowledge and skills in designing, discovering and making various things to solve challenges in society, including cross cutting issues;
- (g) Appreciate procedures and safety rules in using technical tools correctly; and
- (h) Apply the technical knowledge and skills acquired to develop oneself with vocational and technical education and join the workforce.

### **4.0 General Competences of the Occupation**

Upon completion of this occupation, students are expected to have ability to:

- (a) Maintain work place, tools and equipment safety
- (b) Select and purchase quality slaughter stock
- (c) Manage slaughter stock on transit, in holding grounds and lairages
- (d) Operate and perform basic preventive maintenance of tools, equipment and machines
- (e) Conduct hygienic slaughtering to different types of food animals
- (f) Handle meat inspection judgements
- (g) Handle and cure inedible slaughter by-products
- (h) Classify and produce meat cutlets/meat products
- (i) Fatten different species of slaughter animals
- (j) Marketing meat and meat products
- (k) Plan layout and equipment for meat processing and retail facilities.
- (l) Supervise subordinates.

### **5.0 Main and Specific Competences**

The main and specific competences to be developed are presented in Table 1

**Table 1:** *Main and Specific Competences for Form I-IV*

Modules (Main Competence)		Units (Specific competences)	
1.0	Maintaining meat processing facility hygiene, safety and environment	1.1	Maintaining safety in meat processing facility
		1.2	Handling fire in meat processing facility
		1.3	Maintaining hygiene of meat processing facility
		1.4	Maintaining meat processing tools and equipment
		1.5	Maintaining meat processing facility infrastructure
		1.6	Maintaining environment
2.0	Practicing Personal safety and hygiene	2.1	Maintaining personal safety and hygiene
		2.2	Performing first aid
3.0	Operating meat processing facility and machines	3.1	Operating stunning equipment
		3.2	Operating slaughter hall equipment
		3.3	Operating dressing equipment
		3.4	Operating meat cutting machines
		3.5	Operating meat tenderizing machines
		3.6	Operating meat blenders
		3.7	Operating meat packaging machines
4.0	Maintaining quality of slaughter animals	4.1	Classifying slaughter animals
		4.2	Categorizing and grading live animals
		4.3	Transporting slaughter animals
		4.4	Managing slaughter animals in a holding ground and lairage
5.0	Slaughtering of food animals	5.1	Stunning and exsanguination slaughter animals
		5.2	Dressing bled animals
		5.3	Handling of meat passed for human consumption
		5.4	Handling conditional passed meat for human consumption
		5.5	Handling condemned materials
6.0	Performing preventive maintenance of meat processing facilities, tools, equipment and machines	6.1	Performing preventive maintenance of meat processing facility
		6.2	Performing preventive maintenance of meat processing tools
		6.3	Performing preventive maintenance of skinning/flaying equipment and machines
		6.4	Performing preventive maintenance of cutlets and meat products making equipment
		6.5	Perform preventive maintenance of cold room facilities and maintaining inventory
7.0	Performing basic meat classification	7.1	Performing meat classification according to type
		7.2	Performing classification of meat according to source
		7.3	Performing classification of meat according to grades
8.0	Processing slaughter by-products and maintaining cold chain	8.1	Processing of edible by-products
		8.2	Curing and preserving inedible by-products
		8.3	Maintaining cold chain for meat and meat products
9.0	Producing meat cutlets and meat products	9.1	Making meat cuts
		9.2	Making sausages
		9.3	Making other meat products
10.0	Fattening slaughter stock	10.1	Planning layout of feedlot facility
		10.2	Managing feedlot
11.0	Marketing meat and meat products	11.1	Controlling quality of meat and meat products
		11.2	Packing of meat and meat products
		11.3	Pricing and costing meat and meat products
		11.4	Trading meat and meat products
		11.5	Preparing project proposals
12.0	Managing meat processing facility and retailing	12.1	Establishing operational duties and manpower administration
		12.2	Performing meat processing plant operations
		12.3	Procuring supplies

## **6.0 The Roles of Teachers, Students and Parents in Teaching and Learning**

Good relationships between a teacher, student and parent, or guardian is fundamental to ensuring successful learning. This section outlines the roles of each participant in facilitating effective teaching and learning of Meat Processing and Technology.

### **6.1 The teacher**

The teacher is expected to:

- (a) Help the student to learn and develop the intended competences in Meat Processing Technology
- (b) Use teaching and learning approaches that will allow students with different needs and abilities to:
  - (i) Develops the competences needed in the 21<sup>st</sup> Century; and
  - (ii) Actively participate in the teaching and learning process.
- (c) Use student centered instructional strategies that make the student a centre of learning which allow them to think, reflect and search for information from various sources;
- (d) Create a friendly teaching and learning environment;
- (e) Prepare and improvise teaching and learning resources;
- (f) Conduct formative assessment regularly by using tools and methods which assess theory and practice;
- (g) Treat all the students according to their learning needs and abilities;
- (h) Protect the student from the risky environment while he or she is at school;
- (i) Keep track of the student's daily progress;
- (j) Identify individual student's needs and provide the proper intervention;
- (k) Involve parents/guardians and the society at large in the student's learning process; and
- (l) Integrate cross-cutting issues and ICT in the teaching and learning process.

### **6.2 The student**

The student is expected to:

- (a) Develop the intended competences by participating actively in various learning activities inside and outside the classroom; and
- (b) Participate in the search for knowledge from various sources, including textbooks, reference books and other publications in online libraries.

### **6.3 The parent/guardian**

The Parents/Guardian is expected to:

- (a) Monitor the child's academic progress in school;
- (b) Where possible, provide a child with the needed academic support;
- (c) Provide a child with a safe and friendly home environment which is conducive for learning;
- (d) Keep track of a child's progress in behaviour;

- (e) Provide the child with any necessary materials required in the learning process; and
- (f) Instill in a child a sense of commitment and positive value towards education and work.

### **7.0 Teaching and Learning Methods**

The teaching and learning methods are instrumental in developing student's competences. This Syllabus suggests teaching and learning methods for each activity which includes but not limited to demonstration, practical/hands-on activities, observations, role play, simulation, group works, peer teaching/learning, discussions, presentations, field visits, research, and project works. However, a teacher is advised to plan and use other appropriate methods based on the environment or context. All the teaching and learning methods should be integrated with the everyday lives of students. The focus is expected to be on practical application and developing cognitive, affective, and psychomotor skills through learner-centred methods. Vocational teachers act as facilitators, incorporating both school base teaching and project work supervision.

### **8.0 Teaching and Learning Resources**

The process of teaching and learning requires different resources. In that regard, both a teacher and students should work together to collect or improvise alternative resources available in the school and home environment when needed. Teachers and students are expected to constantly seek for information from various sources to effectively facilitate the teaching and learning process. The list of approved textbooks and reference books shall be provided by the TIE.

### **9.0 Assessment**

Assessment is important in teaching and learning of Meat Processing and Technology. It is divided into formative and summative assessments. Formative assessment informs both the teacher and students on the progress of teaching and learning, and in making decisions on improving the teaching and learning process. Teachers are therefore, expected to apply a wide range of formative assessment methods which include but not limited to demonstration, discussions, presentations, oral questions, experiments, observations, practical assignments and projects.

Summative assessment, on the other hand, will focus on determining student's achievement of learning. Teachers are expected to use a variety of summative assessments including Form Two National Assessment, terminal examination, annual examination, mock examination and project. The scores obtained from these assessments will be used as Continuous Assessment (CA). Therefore, the continuous assessments shall contribute 60% and the National Form IV Examination shall be 40% as indicated in Table 2.

### **Project Work**

Project work is a carefully planned and clearly defined task or problem that a student undertakes, either alone or in a group, to enhance and apply the skills and knowledge gained in the classroom, workshop, kitchen, or laboratory. It is based on the principles

of "Learning by Doing" and "Learning by Living." In this context, the implementation of Project Work in secondary schools' vocational streams is essential. Projects in the vocational stream should be conducted in the core subject (occupation). To ensure its success, the supervision and assessment of student project work must be consistent with the established guidelines provided by National Examinations Council of Tanzania (NECTA).

**Table 2:** *Contribution of Continuous Assessment and National Examination in the final score*

Assessment Category	Weight (%)	National Examination
Form Two National Assessment (FTNA)	6.0	40
Form Three Terminal Examination	5.0	
Form Three Annual Examination	5.0	
Form Four Mock Examination	7.0	
Project	7.0	
Form Two Practical	10.0	
Form Three Practical	10.0	
Form Four Practical	10.0	
<b>Total</b>	<b>60</b>	

## 10.0 Number of Periods

The Meat Processing and Technology for Ordinary Secondary Education Vocational Stream Form I-IV provides time estimates for teaching and learning each specific competence. The estimates consider the complexity of the specific competences and the learning activities. Eight (08) periods of 40 minutes each have been allocated per week, whereby two (02) periods will be used for theory and 6 for practical sessions which may require double periods (e.g., 80). Double periods will allow sufficient time for hands-on activities.

## 11.0 Teaching and Learning Contents

The contents of the Syllabus are organised into a matrix with seven (07) columns which are main competences, specific competences, learning activities, suggested teaching and learning methods, assessment criteria which is divided into (process assessment, products/service assessment and underpinning knowledge), suggested teaching and learning resources and number of periods as presented in Table 3 to 6.

## Form One

**Table 3: Detailed contents for Form One**

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
1.0 Maintaining meat processing facility hygiene, safety and environment	1.1 Maintaining safety in meat processing facility	(a) Listing meat processing safety rules and standard operating procedures (SOPs)	<p><b>Brainstorm:</b></p> <p>Guide the students to define safety, and safety behaviour</p> <p>Guide the student to identify the SOPs in the meat processing facility</p> <p><b>Field visits</b></p> <p>Organize visits to meat processing facilities where students can observe safety practices in a real-world context</p> <p><b>Practical work:</b></p> <p>Guide the students to identify appropriate safety gear and how to put on</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, and safety gear</li> <li>• Operate firefighting equipment</li> <li>• Maintain cleanliness of the meat processing facility</li> <li>• Maintain label of the tools and equipment</li> <li>• Observe meat processing facility rules and regulations</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> <li>• Interpret safety signs</li> </ul>	Meat processing safety rules and regulations are well listed and observed	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintain safety ways during meat processing as well as personal safety.</p> <p><b>Principles:</b> The students should explain the principle related to adherence on meat processing safety rules and regulations</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of observing safety rules and regulations governing meat processing facility</li> <li>• General concepts of occupational health and safety</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Gum boots</li> <li>• White trouser</li> <li>• White coat</li> <li>• Gloves</li> <li>• Cap or helmet</li> <li>• Mask</li> <li>• Apron</li> <li>• Books/pamphlets governing meat processing.</li> </ul>	24

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>Identify possible accidents and incidents</li> </ul>		<ul style="list-style-type: none"> <li>Procedure of managing hazards</li> <li>Need for observing personal safety during meat processing</li> <li>Rules and regulations documents for meat processing facilities.</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Occupational health and safety policy</p>		
		(b) Observing meat processing facility safety	<p><b>Brainstorm:</b></p> <p>Guide the students to define equipment, tool and facility</p> <p>Guide the student to identify the SOPs in the meat processing facility</p> <p><b>Site visit::</b></p> <p>Guide the students to walk around the meat processing facility</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Organize work tools, equipment and safety gear</li> <li>Operate firefighting equipment</li> <li>Maintain cleanliness of meat processing facility</li> </ul>	Meat processing safety is maintained according to the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintain safety in a meat processing facility</p> <p><b>Principles:</b> The students should explain the principle related to rules and</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>Gum boots</li> <li>White trouser</li> <li>White coat</li> <li>Gloves</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			and identify safety precautions signage's	<ul style="list-style-type: none"> <li>• Maintain label of the tools and equipment</li> <li>• Observe meat processing facility rules and regulations</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> <li>• Interpret safety signs</li> </ul>		<p>regulations in the meat processing facility.</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of observing safety rules and regulations governing meat processing facility</li> <li>• General concepts of occupational health and safety <ul style="list-style-type: none"> <li>• Importance of using safety gear</li> </ul> </li> <li>• Identify and use of safety tools and equipment in meat processing facility</li> <li>• Control accidents in the meat processing facility</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Safe precautions in dismantling and assembling of</li> </ul>	<ul style="list-style-type: none"> <li>• Cap or helmet</li> <li>• Mask</li> <li>• Apron</li> <li>• Books/pamphlets governing meat processing</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						tools and equipment •Occupational health and safety policy		
	1.2 Handling fire in a meat processing facility	(a) Handling firefighting equipment and materials	<p><b>Brainstorm:</b> Guide the students to define fire and fire extinguishers</p> <p><b>Discussion:</b> Guide the students to discuss on the rules and regulations for fighting fire</p> <p><b>Demonstration</b> Demonstrate to operate a fire extinguisher</p> <p><b>Practical work:</b> Guide the students on how to operate a fire extinguisher</p> <p><b>Site visit</b> Organize the students in manageable groups to identify different types and uses of firefighting equipment and materials</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Select tools, equipment, and safety gear</li> <li>•Identify common classes of fire</li> <li>•Apply right class of fire extinguisher</li> <li>•Handle immediate fire outbreaks</li> <li>•Apply right class of firefighting materials</li> <li>•Clean up tools, equipment and working place <ul style="list-style-type: none"> <li>•Store tools, equipment and safety gear</li> </ul> </li> </ul>	Different firefighting equipment and materials are well handled	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to handling firefighting equipment and materials</p> <ul style="list-style-type: none"> <li>•Identify different types of extinguishers</li> <li>•Apply right class of fire extinguishers</li> <li>•Apply right class of firefighting materials</li> </ul> <p><b>Principles:</b> The students should explain the principle related to handling firefighting equipment and materials</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Firefighting rules and regulations</li> <li>•Workshop rules and regulations</li> <li>•Firefighting equipment</li> <li>•Firefighting materials</li> <li>•First aid kit</li> <li>•Safety boots</li> <li>•Overall</li> <li>•Helmet</li> <li>•Iron gloves</li> </ul>	24

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<p><b>Theories:</b> The students should explain: -</p> <ul style="list-style-type: none"> <li>•Importance of proper handling firefighting equipment</li> <li>•Identifying different type of fire extinguishers</li> <li>•Checking and testing fire extinguishers</li> <li>•Applying right class of fire extinguishers</li> <li>•Importance of checking and servicing fire extinguishers.</li> <li>•Importance of different firefighting materials</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Safety precautions while handling fire accidents</p>		

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(b) Managing different classes of fire	<p><b>Discussion:</b> Guide the students to discuss the common sources of fire outbreak and classes of fire</p> <p><b>Outdoor drill</b> Organize a supervised outdoor drill where students learn to extinguish small fires using water, sand, or fire extinguishers</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Select tools, equipment and safety gear</li> <li>• Identify common classes of fire</li> <li>• Apply right class of fire extinguisher</li> <li>• Handle immediate fire</li> <li>• Apply right class of firefighting materials</li> <li>• Clean up tools, equipment and working place</li> <li>• Store tools, equipment and safety gear</li> </ul>	Different classes of fire are correctly managed	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to manage different classes of fire <b>Principles:</b> The students should explain the principle related to management of different classes of fire <b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of handling fire accidents</li> <li>• Common classes of fire</li> <li>• Managing different classes of fire</li> <li>• Importance of checking and servicing fire extinguishers.</li> <li>• Types of firefighting materials</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Firefighting equipment</li> <li>• Firefighting materials</li> <li>• First aid kit</li> <li>• Safety boots</li> <li>• Overall</li> <li>• Helmet</li> <li>• Iron gloves</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safety precautions while handling fire accidents</li> <li>• Safe handling of tools and equipment</li> </ul>		
	1.3 Maintaining hygiene of meat processing facility	(a) Practicing use of sanitary agents	<b>Brainstorm:</b> Guide the students to define detergent, dirty, contamination, and sterilizer <b>Peer Teaching</b> Guide students to teach each other proper sanitary practices <b>Field visit:</b> Organize the students in manageable groups to identify good cleaning agents at school	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize tools, equipment, machines and sanitary agents for cleaning</li> <li>• Calibrate required amount of sanitary agents</li> <li>• Dismantle cleaning tools and equipment</li> <li>• Assemble cleaning tools and equipment</li> <li>• Clean tools, equipment, machines and workplace</li> </ul>	Sanitary agents used according to Tanzania Code of Hygiene for Food	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to use different sanitary agents <b>Principles:</b> The students should explain the principle related to uses of different sanitary agents <b>Theories:</b> The students should explain: - <ul style="list-style-type: none"> <li>• Major types of sanitary agents</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Cleaning agents</li> <li>• Measuring cylinder</li> <li>• Cap or helmet.</li> <li>• Bucket</li> <li>• Mask</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Gloves</li> <li>• Plastic apron</li> </ul>	48

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>•Wash and iron clothes used in slaughter facility</li> <li>•Store tools, equipment and safety gear</li> <li>•Dispose wastes</li> <li>•Observe occupational health and safety precautions</li> </ul>		<ul style="list-style-type: none"> <li>•Necessity of using detergents and disinfectant</li> <li>•Characteristics of different sanitary agents used in food processing facility</li> </ul> <p><b>Circumstantial knowledge:</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Proper waste disposal system</li> <li>•Precautions during handling and disposal of detergents and disinfectants</li> <li>•Personal precaution during conducting emergency cleaning</li> <li>•Occupational Health and Safety Policy</li> </ul>	•Laundry machine	
		(b) Cleaning meat processing facility	<b>Brainstorm:</b> Guide the students to define cleaning and sanitation	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize tools, equipment,</li> </ul>	meat processing facility cleaned according to Tanzania Code of Hygiene for Food	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b></p>	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Demonstration</b> Demonstrate how to clean a processing facility  <b>Practical work:</b> Guide the students on how to clean a processing facility  <b>Field Visits</b> Organize visits to meat processing facilities or invite industry experts to speak about best cleaning practices	machines and sanitary agents  <ul style="list-style-type: none"> <li>• Calibrate required amount of sanitary agents</li> <li>• Clean meat processing facility</li> <li>• Disinfect meat processing facility</li> <li>• Clean tools, equipment, machines and workplace</li> <li>• Wash and iron processing clothes</li> <li>• Store tools, equipment and safety gear</li> <li>• Observe occupational health and safety precautions</li> </ul>		<b>Method used:</b> The students should explain how to maintain cleanliness of meat processing facilities, tools and equipment in different ways.  <b>Principles:</b> The students should explain the principle of:  <ul style="list-style-type: none"> <li>• Cleaning meat processing facility</li> <li>• Sterilizing tools</li> </ul> <b>Theories:</b> The students should explain:-  <ul style="list-style-type: none"> <li>• Major types of cleaning and their importance</li> <li>• Purposes of cleaning meat processing facility, tools and equipment</li> <li>• Important of maintain hygiene of the meat processing facility</li> </ul> <b>Circumstantial knowledge:</b>	The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Cleaning agents</li> <li>• Measuring cylinder</li> <li>• Cap or helmet.</li> <li>• Bucket</li> <li>• Mask</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Gloves</li> <li>• Plastic apron</li> <li>• Pressurized Cleaning machine</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Proper waste disposal system</li> <li>• Personal precaution during conducting emergency cleaning</li> <li>• Occupational Health and Safety Policy</li> <li>• Safe handling of tools and equipment</li> </ul>		
		(c) Disinfecting meat processing facility	<b>Brainstorm:</b> Guide the students to define disinfectants and disinfection  <b>Demonstration</b> Demonstrate how to disinfecting meat processing facility  <b>Practical work:</b> Guide the students to disinfect a processing facility using the principles of cleaning  <b>Site visit:</b> Organize the students to visit a nearby slaughterhouse and	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize tools, equipment, machines and sanitary agents for cleaning</li> <li>• Calibrate required amount of sanitary agents</li> <li>• Disinfect meat processing facility</li> <li>• Clean tools, equipment, machines and workplace</li> </ul>	Meat processing facility disinfected according to Tanzania Code of Hygiene for Food	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to disinfect meat facilities.  <b>Principles:</b> The students should explain the principle related to disinfection of meat processing facility	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Disinfectants</li> <li>• Measuring cylinder</li> <li>• Cap or helmet.</li> <li>• Bucket</li> <li>• Mask</li> <li>• Dust bins</li> <li>• Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			participate in disinfecting the meat processing facility	<ul style="list-style-type: none"> <li>• Wash and iron clothes used in slaughter facility</li> <li>• Store tools, equipment and safety gear</li> <li>• Observe occupational health and safety precautions</li> </ul>		<p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Types of disinfectants</li> <li>• Necessity of using detergents and disinfectant</li> <li>• Properties of best food processing disinfectants</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Precautions during handling and disposal disinfectants</li> <li>• Occupational Health and Safety Policy</li> <li>• Safe handling of tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Overall</li> <li>• Gloves</li> <li>• Plastic apron</li> </ul>	
		(d) Sterilizing meat processing	<b>Brainstorm:</b>	<b>The students should be able to:</b>	Meat processing tools/equipment and safety gear	<b>Knowledge evidence:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		tools/equipment and safety gear	<p>Guide the students to define sterilization and safety</p> <p><b>Practical work:</b></p> <p>Guide the students on how to sterilize meat processing tools/equipment and safety gear</p>	<ul style="list-style-type: none"> <li>•Organize tools, equipment, machines and sanitary agents for cleaning</li> <li>•Clean tools, equipment, machines and workplace</li> <li>•Sterilize tools and equipment</li> <li>•Wash and iron clothes used in slaughter facility</li> <li>•Store tools, and equipment</li> </ul>	sterilized according to Tanzania Code of Hygiene for Food	<p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how sterilize tools, equipment and safety gear</p> <p><b>Principles:</b> The students should explain the principle related to sterilization of tools, equipment and safety gear.</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Methods of sterilization</li> <li>•Sterilization of tools</li> <li>•Sterilization of equipment</li> <li>•Sterilization of safety gear</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Precautions during handling and</li> </ul>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Disinfectants</li> <li>•Measuring cylinder</li> <li>•Cap or helmet.</li> <li>•Bucket</li> <li>•Mask</li> <li>•Dust bins</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Gloves</li> <li>•Plastic apron</li> <li>•Sterilizer /oven</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						disposal of detergents and disinfectants •Occupational Health and Safety Policy •Safe handling of tools and equipment		
	1.4 Maintaining meat processing tools and equipment	(a) Maintaining sharpness of knives and butcher cleaver	<p><b>Brainstorm:</b> Guide the students to define grinding, steeling and honing of knives and butcher cleaver</p> <p><b>Peer teaching and collaboration</b> Guide the students to form two groups. One group could demonstrate the use of a whetstone, while another explains how to maintain sharpening angles</p> <p><b>Activity:</b> Organize the students in manageable groups to identify different tools and equipment</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Sharpen tools</li> <li>•Lubricate moving parts</li> <li>•Tighten loose bolts and nuts</li> <li>•Keep different records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Knives and butcher cleavers maintained to operate according to their specific functions	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to differentiate ways involved in sharpening knives and butcher cleaver. <b>Principles:</b> The students should explain principles of:</p> <ul style="list-style-type: none"> <li>•Operating grinding stone</li> <li>•Using steel sharpener</li> <li>•Lubricating equipment</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Steel sharpener</li> <li>•Grinder</li> <li>•Set of knives</li> <li>•Butcher cleaver</li> <li>•Protective eye glasses</li> </ul>	24

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>used for sharpening knives and butchers cleavers</p> <p><b>Demonstration</b> Demonstrate how to sharpen of knives and butcher cleaver</p> <p><b>Practical work:</b> Guide the students on how to sharpen butcher cleaver and knives</p>			<ul style="list-style-type: none"> <li>• Storing sharpeners and sharpened tools</li> <li>• Theories: The students should explain:-</li> <li>• Importance of lubricating moving parts</li> <li>• Need of sharpening tools and equipment</li> <li>• Essence of observing angles when sharpening blade</li> <li>• Types of lubricants used in food industry</li> <li>• Types of maintenances</li> <li>• Importance of carryout preventive maintenance</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Safety precautions during sharpening</li> </ul>		

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Safe handling of tools and equipment</li> <li>•</li> </ul>		
		(b) Maintaining meat processing tools.	<p><b>Brainstorm:</b> Guide the students to explain the meaning of a tool</p> <p><b>Discussion:</b> Guide the students to discuss different types of tools used in meat processing facilities</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify different meat processing tools and their functions</p> <p><b>Practical work:</b> Guide the students on how to maintain cleanliness of meat processing tools</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Sharpen tools</li> <li>• Lubricate moving parts</li> <li>• Tighten loose bolts and nuts</li> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	Meat processing tools maintained to operate according to their specific functions	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to differentiate ways involved in sharpening knives and butcher cleaver. <b>Principles:</b> The students should explain principles of maintaining meat processing tool <b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of lubricating moving parts</li> <li>• Need of sharpening tools and equipment</li> <li>• Essence of observing angles</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Steel sharpener</li> <li>• Grinder</li> <li>• Set of knives</li> <li>• Butcher cleaver</li> <li>• Oil can</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Hooks</li> <li>• Hand meat saw</li> <li>• Hand axe</li> <li>• Buckets</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						when sharpening blade •Types of lubricants used in food industry •Types of maintenances •Importance of carryout preventive maintenance <b>Circumstantial knowledge:</b> <b>Detailed knowledge about:</b> •Safety precautions during sharpening •Safe handling of tools and equipment		
		(c) Maintaining meat processing equipment.	<b>Brainstorm:</b> Guide the students to define some terminologies <b>Discussion:</b> Guide the students to discuss the importance of maintaining meat	<b>The students should be able to:</b> •Organize work tools, equipment, utensils and safety gear •Lubricate moving parts •Tighten loose bolts and nuts	Meat processing equipment, maintained to operate according to their specific functions	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to differentiate ways involved in	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- •Steel sharpener •Grinder	

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>processing equipment.</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify different equipment</p> <p><b>Practical work:</b> Guide the students on how to maintain meat processing equipment.</p>	<ul style="list-style-type: none"> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<p>sharpening knives and butcher cleaver</p> <p><b>Principles:</b> The students should explain principles of:</p> <ul style="list-style-type: none"> <li>• Operating grinding stone</li> <li>• Using steel sharpener</li> <li>• Lubricating equipment</li> <li>• Storing sharpeners and sharpened tools</li> </ul> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of lubricating moving parts</li> <li>• Need of sharpening tools and equipment</li> <li>• Essence of observing angles when sharpening blade</li> <li>• Types of lubricants used in food industry</li> </ul>	<ul style="list-style-type: none"> <li>• Set of knives</li> <li>• Butcher cleaver</li> <li>• Oil can</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Hooks</li> <li>• Hand meat saw</li> <li>• Hand axe</li> <li>• Buckets</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Types of maintenances</li> <li>•Importance of carryout preventive maintenance</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Safety precautions during sharpening</li> <li>•Safe handling of tools and equipment</li> </ul>		
		(d) Storing meat processing tools and equipment	<p><b>Brainstorm:</b></p> <p>Guide the students to explain importance of proper storage for tools and equipment.</p> <p><b>Site visit:</b> Organize the students in manageable groups to visit a nearby abattoir and identify storage methods of tools and equipment.</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Store tools and equipment in a container or kit</li> <li>•Hang tools and equipment</li> <li>•Cover tool and equipment</li> <li>•Cover oil coat on tools and</li> </ul>	Tools and equipment stored as per the recommended procedures.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to differentiate ways involved in.</p> <p>Storage of tools and equipment</p> <p><b>Principles:</b> The students should explain principles of storing tools and equipment</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Steel sharpener</li> <li>•Grinder</li> <li>•Set of knives</li> <li>•Butcher cleaver</li> <li>•Oil can</li> <li>•Dust bins</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				equipment surfaces. • Keep different records Clean site or storage containers • Store tools and equipment		• <b>Theories:</b> The students should explain:- • Importance of proper storage • Essence of applying oil coat on tools and equipment before storage. • Types of lubricants used in food industry • Types of maintenances • Importance of carryout preventive maintenance <b>Circumstantial knowledge:</b> <b>Detailed knowledge about:</b> Effect of moisture and salt on stored tools and equipment.	• Gum boots • Overall • Cap or helmet • Hooks • Hand meat saw • Hand axe • Buckets	
	1.5 Maintaining meat processing equipment /machines	(a) Identifying systems and parts of machines	<b>Brainstorm:</b>	<b>The students should be able to:</b> • Organize work tools, equipment,	Systems and parts of machines identified as	<b>Knowledge evidence:</b>	This element can be achieved at a work place or training institution.	36

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Guide the students to define equipment and machine</p> <p><b>Discussion:</b></p> <p>Guide the students to discuss different types of machines used in meat processing facilities</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify different processing machines and their functions</p> <p><b>Practical work:</b></p> <p>Guide the students on how to identify different systems and parts of meat processing machines</p>	<p>utensils and safety gear</p> <ul style="list-style-type: none"> <li>• Observe refrigeration gas refill level</li> <li>• Regulate refrigeration temperatures</li> <li>• Tighten loose bolts and nuts</li> <li>• Test machines</li> <li>• Identify preventive maintenance required in meat processing facility</li> </ul>	specified by manufacturers	<p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintaining meat processing equipment /machines</p> <p><b>Principles:</b> The student should explain principles in identifying systems and parts of machines</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of carryout preventive maintenance in machines</li> <li>• Parts of machine/equipment to be lubricated.</li> <li>• Different gases used in cooling systems</li> <li>• Essential lubricants used in food industry</li> </ul>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Toolkits</li> <li>• Refrigeration gas cylinders</li> <li>• Boiler</li> <li>• Refrigeration systems</li> <li>• Refrigeration and machine manuals</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Gloves</li> <li>• Overall</li> <li>• Cap or helmet.</li> <li>• Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Important boiler parts and their functions</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Safety precautions in operating boilers</li> <li>• Safety precautions in operating cooling systems</li> <li>• Boiler inspection and certification procedure</li> <li>• Safe handling of tools, equipment and machines</li> </ul>		
		(b) Servicing and repair of meat processing equipment /machines	<p><b>Brainstorm:</b></p> <p>Guide the students to define servicing and routine maintenance of machines</p> <p><b>Discussion:</b></p> <p>Guide the students to discuss importance of routine maintenance</p> <p><b>Site visit:</b> Organize the students in</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Lubricate moving parts</li> <li>• Observe refrigeration gas refill level</li> </ul>	Machines, cooling system and boiler serviced capacity as specified by manufacturers	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to service and repair of meat processing equipment /machines</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Grease gun</li> <li>• Oil can</li> <li>• Toolkits</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			manageable groups to walk around the meat processing facility and identify different tools, equipment and materials used in servicing and repair of meat processing machines  <b>Practical work:</b> Guide the students on how to service different meat processing machines	<ul style="list-style-type: none"> <li>•Regulate refrigeration temperatures</li> <li>•Tighten loose bolts and nuts</li> <li>•Test machines</li> <li>•Identify preventive maintenance required in meat processing facility</li> </ul>		<p><b>Principles:</b> The student should explain principles of:</p> <ul style="list-style-type: none"> <li>•Gas refilling</li> <li>•Servicing Boilers</li> <li>•Operating boiler</li> <li>•Cooling meat and meat products</li> </ul> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Importance of carrying out preventive maintenance in machines</li> <li>•Parts of machine/equipment to be lubricated.</li> <li>•Different gases used in cooling systems</li> <li>•Essential lubricants used in food industry</li> <li>•Important boiler parts and their functions</li> </ul> <p><b>Circumstantial knowledge</b></p>	<ul style="list-style-type: none"> <li>•Refrigeration gas cylinders</li> <li>•Boiler</li> <li>•Refrigeration systems</li> <li>•Refrigeration and machine manuals</li> <li>•Dust bins</li> <li>•Gum boots</li> <li>•Gloves</li> <li>•Overall</li> <li>•Cap or helmet.</li> <li>•Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safety precautions in operating boilers</li> <li>• Safety precautions in operating cooling system.</li> <li>• Boiler inspection and certification procedure</li> <li>• Safe handling of tools, equipment and machines</li> </ul>		
		(c) Maintaining water heating systems	<b>Brainstorm:</b> Guide the students to identify different water heating systems (boiler, cooking pot and shrink wrap) in meat processing facilities  <b>Discussion:</b> Guide the students to discuss the importance of hot water systems in a meat processing facility  <b>Site visit:</b> Organize the students in	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Lubricate moving parts</li> <li>• Observe refrigeration gas refill level</li> <li>• Regulate refrigeration temperatures</li> <li>• Tighten loose bolts and nuts</li> </ul>	Machines, cooling system and boiler serviced and operated to their optimal capacity as specified by manufacturers	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to: <ul style="list-style-type: none"> <li>• Service and refilling gases in cooling systems</li> <li>• Service machines, cooling system and boiler</li> <li>• Cool meat in meat trade</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Grease gun</li> <li>• Oil can</li> <li>• Toolkits</li> <li>• Refrigeration gas cylinders</li> <li>• Boiler</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			manageable groups to identify different parts of boiler, cooking pot and shrink wrap  <b>Practical work:</b> Guide the students on how to service boilers, cooking pot and shrink wrap heating systems	<ul style="list-style-type: none"> <li>• Test machines</li> <li>• Identify preventive maintenance required in meat processing facility</li> </ul>		<p><b>Principles:</b> The student should explain principles of:</p> <ul style="list-style-type: none"> <li>• Gas re-filling</li> <li>• Servicing Boilers</li> <li>• Operating boiler</li> <li>• Cooling meat and meat products</li> </ul> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of carrying out preventive maintenance for machines</li> <li>• Parts of machine/equipment to be lubricated.</li> <li>• Different gases used in cooling systems</li> <li>• Essential lubricants used in food industry</li> <li>• Important boiler parts and their functions</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigeration systems</li> <li>• Refrigeration and machine manuals</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safety precautions in operating boilers</li> <li>• Safety precautions in operating cooling systems</li> <li>• Boiler inspection and certification procedure</li> <li>• Safe handling of tools, equipment and machines</li> </ul>		
		(d) Maintaining freezing and chilling machines	<b>Brainstorm:</b> Guide the students to identify different freezing and chilling machines <b>Discussion:</b> Guide the students to discuss the importance of freezing and chilling machines in a meat processing facility <b>Site visit:</b> Organize the students in manageable groups to identify different	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Lubricate moving parts</li> <li>• Observe refrigeration gas re-fill level</li> <li>• Regulate refrigeration temperatures</li> </ul>	Cooling system and boiler maintained as specified by manufacturers	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintaining freezing and chilling machines: <b>Principles:</b> The student should explain principles of gas refilling	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Grease gun</li> <li>• Oil can</li> <li>• Toolkits</li> <li>• Refrigeration gas cylinders</li> <li>• Boiler</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>parts of freezing and chilling machines</p> <p><b>Practical work:</b></p> <p>Guide the students on how to service freezing and chilling machines</p>	<ul style="list-style-type: none"> <li>• Tighten loose bolts and nuts</li> <li>• Test machines</li> <li>• Identify preventive maintenance required in meat processing facility</li> </ul>		<p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of carryout preventive maintenance in machines</li> <li>• Parts of machine/equipment to be lubricated.</li> <li>• Different gases used in cooling systems</li> <li>• Essential lubricants used in food industry</li> <li>• Important boiler parts and their functions</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Safety precautions in operating boilers</li> <li>• Safety precautions in operating cooling systems</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigeration systems</li> <li>• Refrigeration and machine manuals</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Gloves</li> <li>• Overall</li> <li>• Cap or helmet.</li> <li>• Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>Boiler inspection and certification procedure</li> <li>Safe handling of tools, equipment and machines</li> </ul>		
	1.6 Maintaining meat processing facility infrastructure	(a) Maintaining buildings	<p><b>Brainstorm:</b> Guide the students to define disinfection and contamination</p> <p><b>Discussion:</b> Guide the students to discuss the importance of performing building maintenance</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify different areas of meat processing building which may need repair and maintenance</p> <p><b>Practical work:</b> Guide the students on how to clean and disinfect a building.</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Organize work tools, equipment, utensils and safety gear</li> <li>Identify infrastructure damages</li> <li>Report infrastructure damages</li> <li>Keep different records</li> <li>Clean tools, equipment and workplace</li> <li>Store tools and equipment</li> </ul>	Buildings as per health and safety requirements	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain different types of meat processing infrastructure</p> <p><b>Principles:</b> The students should explain the principles related to maintenance of buildings</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>Importance of maintaining buildings</li> <li>Writing of simple report</li> </ul>	<p>. This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>Wheelbarrow</li> <li>Gum boots</li> <li>Heavy duty gloves</li> <li>Overall</li> <li>Cap or helmet</li> <li>Protective eye glasses</li> <li>Mask</li> </ul>	60

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safety precautions in maintaining high elevated buildings</li> <li>• Precaution of meat tainting with paints after repair</li> </ul>		
		(b) Maintaining effluent drainage system	<b>Brainstorm:</b> Guide the students to define effluent <b>Discussion:</b> Guide the students to discuss methods of disposing effluents (common effluent drain system, absorption trenches, and on-site effluent disposal systems) <b>Site visit:</b> Organize the students in manageable groups to visit and observe different types of drainage systems <b>Practical work:</b> Guide the students on how to clean meat	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify infrastructure damages</li> <li>• Report infrastructure damages</li> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	Effluent drainage system as per health and safety requirements	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain effluent drainage system <b>Principles:</b> The students should explain the principles related to effluent drainage system <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of maintaining drainage systems</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Protective eye glasses</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			processing drainage systems			<ul style="list-style-type: none"> <li>• Writing of simple report</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Hazards associated with handling of effluents		
		(c) Maintaining oxidation ponds	<b>Brainstorm:</b> Guide the students to define series, parallel, and recirculation operation of oxidation ponds <b>Discussion:</b> Guide the students to discuss the importance of maintaining oxidation ponds <b>Site visit:</b> Organize the students in manageable groups to visit and observe different types of oxidation ponds	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify infrastructure damages</li> <li>• Report infrastructure damages</li> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	Oxidation ponds maintained as per health and safety requirements	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain oxidation ponds <b>Principles:</b> The students should explain the principles related to maintenance of oxidation ponds <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of maintaining oxidation ponds</li> <li>• Writing of simple report</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Protective eye glasses</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b>  <b>Detailed knowledge about:</b> Possible end uses of water from oxidation ponds		
		(d) Maintaining incinerator and decomposition pit	<b>Brainstorm:</b> Guide the students to define incinerator and decomposition pit  <b>Site visit:</b> Organize the students in manageable groups to visit nearby decomposition pit and incinerator sites	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify infrastructure damages</li> <li>• Report infrastructure damages</li> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	Incinerator and decomposition pit maintained as per health and safety requirements	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain incinerator and decomposition pit  <b>Principles:</b> The students should explain the principles related to incinerator and decomposition pit  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Writing of simple report</li> </ul> <b>Circumstantial knowledge</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• glasses</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safety precautions in maintaining high elevated buildings and fences</li> <li>• Precaution of meat tainting with paints after repair</li> </ul>		
		(e) Maintaining fence and pavements	<b>Brainstorm:</b> Guide the students to define dead and live fences <b>Site visit:</b> Organize the students in manageable groups to visit and see different types of fences, and pavements <b>Practical work:</b> Guide the students on how to make maintenance and repair woven and barbed wire fences, and pavements	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify infrastructure damages</li> <li>• Report infrastructure damages</li> <li>• Keep different records</li> <li>• Clean tools, equipment and workplace</li> </ul>	Fence and pavements maintained as per health and safety requirements	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain fence and pavement <b>Principles:</b> The students should explain the principles fence and pavement <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of maintaining fence</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Protective eye glasses</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>•Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>•Importance of maintaining pavements</li> <li>•Writing of simple report</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Safety precautions in maintaining high elevated buildings and fences</li> <li>•Precaution of meat tainting with paints after repair</li> </ul>		
	1.7 Maintaining environment	(a) Maintaining cleanliness of meat processing facility environment	<p><b>Brainstorm:</b> Guide the students to define cleanliness</p> <p><b>Discuss:</b> Guide the student to discuss the importance of cleaning meat processing environment</p> <p><b>Practical work:</b> Guide the students to slash the</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Handle different types of wastes</li> <li>•Clean drainage systems and chambers</li> <li>•Perform landscaping</li> </ul>	Cleanliness of meat processing facility maintained as per Occupational Health and Safety demands	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge:</b></p> <p><b>Method used:</b> The students should explain how to maintain the clean environment and cleanness of the meat processing facility</p> <p><b>Principles:</b> The students should</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Wheelbarrow</li> <li>•Rake</li> <li>•Fork</li> <li>•Shovel</li> </ul>	36

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			environment of the processing facility	<ul style="list-style-type: none"> <li>•Control pests and insects</li> <li>•Clean tools and equipment</li> <li>•Store tools and equipment</li> <li>•Dispose wastes</li> </ul>		<p>explain the principles of:</p> <ul style="list-style-type: none"> <li>•Fumigation of meat processing facility.</li> </ul> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Importance of maintaining a meat processing facility environment</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Presence of malicious use of condemned materials</li> <li>•Safe handling of tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>•Bush knife</li> <li>•Hand hoe</li> <li>•Reciprocating mower</li> <li>•Spades</li> <li>•Mask</li> <li>•Hand spray pump</li> <li>•Dust bins</li> <li>•Gum boots</li> <li>•Gloves</li> <li>•Overall</li> <li>•Cap or helmet</li> <li>•Protective eye glasses</li> </ul>	
		(b) Handling and disposing of wastes	<p><b>Brainstorm:</b></p> <p>Guide the students to define waste, incinerator</p> <p><b>Discuss:</b></p> <p>Guide the student to discuss the importance of waste disposal, necessary</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Handle different types of wastes</li> </ul>	Wastes handled and disposed as per Occupational Health and Safety demands	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge:</b></p> <p><b>Method used:</b> The students should explain how to handle and dispose wastes</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Wheelbarrow</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			steps on disposing waste materials	<ul style="list-style-type: none"> <li>• Clean drainage systems and chambers</li> <li>• Perform landscaping</li> <li>• Control pests and insects</li> <li>• Clean tools and equipment</li> <li>• Store tools and equipment</li> <li>• Dispose wastes</li> </ul>		<p><b>Principles:</b> The students should explain the principles of handling and disposing different types of waste materials</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Types of waste and their means of disposal</li> <li>• Economical uses of wastes from meat processing</li> <li>• Effects of improper disposal of effluents and condemned materials</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Presence of malicious use of condemned materials</li> <li>• Safe handling of tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Rake</li> <li>• Fork</li> <li>• Shovel</li> <li>• Bush knife</li> <li>• Hand hoe</li> <li>• Reciprocating mower</li> <li>• Spades</li> <li>• Mask</li> <li>• Hand spray pump</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• Gloves</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(c) Maintaining surroundings of meat processing environment	<p><b>Brainstorm:</b> Guide the students to define hazardous waste, condemned materials and fumigation</p> <p><b>Site visit:</b> Organize the students in manageable groups and walk around the school campus to identify hazardous wastes</p> <p><b>Practical</b> Guide the students to maintain surroundings of meat processing environment</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Handle different types of wastes</li> <li>•Clean drainage systems and chambers and walkways</li> <li>•Perform landscaping</li> <li>•Control pests and insects</li> <li>•Clean tools and equipment</li> <li>•Store tools and equipment</li> <li>•Dispose wastes</li> </ul>	Surroundings of meat processing environment maintained as per Occupational Health and Safety demands	<p><b>Knowledge evidence:</b> <b>Detailed knowledge:</b> <b>Method used:</b> The students should explain how to maintain the environment and surroundings of the meat processing facility</p> <p><b>Principles:</b> The students should explain the principles of maintaining all surrounding components for the meat processing environment</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Environmental pollution</li> <li>•Effect of chemical wastes to environment</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Wheelbarrow</li> <li>•Rake</li> <li>•Fork</li> <li>•Shovel</li> <li>•Bush knife</li> <li>•Hand hoe</li> <li>•Reciprocating mower</li> <li>•Spades</li> <li>•Mask</li> <li>•Hand spray pump</li> <li>•Dust bins</li> <li>•Gum boots</li> <li>•Gloves</li> <li>•Overall</li> <li>•Cap or helmet.</li> <li>•Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Presence of malicious use of condemned materials</li> <li>• Safe handling of tools and equipment</li> </ul>		
2.0 Practicing Personal safety and hygiene	2.1 Maintaining personal safety and hygiene	(a) Practicing personal protection	<p><b>Brainstorm:</b> Guide the students to define personal protection, safety gear, hygiene</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify safety gear used in personal protection and the uses of each safety gear</p> <p><b>Practical Activity:</b> Guide the students to wash hand and wear protective gear</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize tools, equipment for personal protection in meat processing facilities</li> <li>• Wear safety gear</li> <li>• Observe operation precautions</li> <li>• Wear off the gear</li> <li>• Clean the safety gear</li> </ul>	Personal protection is well practiced in a meat processing facility to avoid injuries	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The student should explain how to practice personal protection in a meat processing facility</p> <p><b>Principles:</b> The student should explain principles involved in ensuring personal protection</p> <p><b>Theories:</b></p> <ul style="list-style-type: none"> <li>• Wear appropriate protective gear</li> <li>• Precautions related to machines operation</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Mask</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Gloves</li> <li>• White trouser</li> <li>• White overcoat</li> <li>• Iron apron</li> </ul>	276

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Circumstantial knowledge</li> <li>•Detailed knowledge about:</li> <li>•Healthy working habits</li> <li>•Routine medical check-up</li> <li>•Professional ethics</li> </ul>		
		(b) Maintaining personal safety	<b>Brainstorm:</b> Guide the students to define safety, safety signs, hazards, accident  <b>Site visit:</b> Organize the students in manageable groups to observe and interpret safety signs in a meat processing facility	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify safety signs</li> <li>•Interpret safety signs</li> <li>•Adhere to safety sign messages</li> <li>•Identify hazards</li> </ul>	Personal safety in the meat processing facility is maintained as per the recommended procedure	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to protect themselves from accidents  <b>Principles:</b> The student should explain the principles of self-protection in a meat processing facility  <b>Theories:</b> The students should explain :	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Cap or helmet</li> <li>•Mask</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Gloves</li> <li>•White trouser</li> <li>•White overcoat</li> <li>•Iron apron</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Importance of maintaining personal safety</li> <li>•Meaning the given safety signs in meat processing</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Meat processing Occupational hazards</p>		
		(c) Practicing personal Hygiene	<p><b>Brainstorm:</b></p> <p>Guide the students to define personal hygiene</p> <p><b>Discuss:</b></p> <p>Guide the student to discuss the importance of practicing personal Hygiene</p> <p><b>Practical work:</b></p> <p>Guide the students to wash and sanitize their hands</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils, and safety gear</li> <li>•Wear safety gear</li> <li>•Wash hands</li> <li>•Dry your hands</li> <li>•Sanitize hands</li> <li>•Avoid bad habit</li> <li>•Undergo routine medical check up</li> </ul>	Personnel working in a meat processing facility maintain personal hygiene as per the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintain personal hygiene</p> <p><b>Principles:</b></p> <p>The student should explain the principles of maintaining personal safety in a meat processing facility</p> <p><b>Theories:</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Mask</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Gloves</li> <li>•White trouser</li> <li>•White overcoat</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•The students should explain</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Occupational hazards</li> <li>•SOPs</li> <li>•Wash hands</li> <li>•Sanitize hands</li> </ul>	<ul style="list-style-type: none"> <li>•Iron apron</li> <li>•Hand washing basin</li> <li>•Soap</li> <li>•Towel or tissues</li> <li>•Sanitizers</li> </ul>	
		(d) Handling hazards in meat processing facilities	<b>Brainstorm:</b> Guide the students to define hazards and facility  <b>Site visit:</b> Organize the students in manageable groups to identify and record different types of hazards in meat processing facilities	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Make regular inspections of the meat processing facility</li> <li>•Identify hazard materials around the meat processing facility</li> <li>•Handle different types of hazards at the processing facility</li> </ul>	Hazards well handled in the meat processing facility	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to handle hazards in meat processing facility <b>Principles:</b> The student should explain principles related to handling meat processing hazards <b>Theories:</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Cap or helmet</li> <li>•Mask</li> <li>•Gumboots</li> <li>•Mechanical equipment</li> <li>•Overall</li> <li>•Fire extinguisher</li> <li>•Gloves</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
						<p>The students should explain:</p> <ul style="list-style-type: none"> <li>• Causes of meat processing hazards</li> <li>• Types of hazard and their control methods</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Occupational hazards</li> <li>• SOPs</li> </ul>	<ul style="list-style-type: none"> <li>• White trouser</li> <li>• White overcoat</li> <li>• Iron apron</li> <li>• Clear safety glasses</li> <li>• Tool kit</li> </ul>	
	2.2 Performing first aid	(a) Performing Artificial respiration	<p><b>Brainstorm:</b></p> <p>Guide the students to define drowning</p> <p><b>Practical work:</b></p> <p>Guide the students on how to perform artificial respiration to a person drowned in water by using human models or video clips/human models</p> <p><b>Demonstration</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize working first aid tools, equipment and safety gear</li> <li>• Perform simple diagnosis</li> <li>• Identify water source around the premises</li> </ul>	Artificial respiration well performed	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to perform artificial respiration</p> <p><b>Principles:</b> The student should explain principles related to the</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Life jacket</li> <li>• Artificial person</li> <li>• Respiration tools</li> <li>• Light blankets</li> </ul>	207

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Demonstrate to students different ways of performing artificial respiration services to a drowned victim by using short videos/human model.	<ul style="list-style-type: none"> <li>• Lie the victim (human model) on the floor</li> <li>• Open the airway</li> <li>• Remove any unclogged materials</li> <li>• Perform chest artificial respiration using human model</li> <li>• Sterilize tools and equipment</li> <li>• Store tools and equipment</li> </ul>		artificial respiration process <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Safety precautions when performing first aid</li> <li>• Factors of consideration when performing artificial respiration</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• death (cessation of all biological functions that sustain a living organism),</li> </ul>		
		(b) Performing first aid to minor injuries	<b>Brainstorm:</b> Guide the students to define cuts/wound, and first aid <b>Discussion</b> Organize the students in manageable	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify a victim with cuts and wounds</li> <li>• Identify the materials and</li> </ul>	First aid to minor injuries / burn attended in accordance with medical guidelines	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:-	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
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			groups to identify equipment and materials for wound management Demonstration Demonstrate to students how to perform wound dressing <b>Practical work:</b> Guide the students to perform wound dressing	tools from first aid kit • Wash hands • Wear gloves • Stop the bleeding: • Clean the cut or wound or burn • Apply wound antiseptic • Dress/cover the wound or burn • Cool the wound • Prepare injured person for hospitalization • Keep different records • Sterilize tools and equipment • Store tools and equipment		attend to minor injuries and burns <b>Principles:</b> The student should explain principles related to first aid provision to minor wounds and burns <b>Theories:</b> The students should explain • Management of fresh wound • Types of minor wounds • Management of burn wounds • Handling fire accident • Recommended wound antiseptics <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Carefulness is highly required in attending oozing fresh blood	• First aid kit • insulated stick • Sterilizer • Thermometer • Stretcher • Crutches' • Dust bins • Gum boots • Surgical gloves • Overall	
		(c) Maintaining First Aid Kit	<b>Brainstorm:</b>	<b>The students should be able to:</b>	First aid kit is well maintained	<b>Knowledge evidence:</b>	This element can be achieved at a work	

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			<p>Guide the students to discuss and identify basic contents of first aid kit</p> <p><b>Group work:</b> Organize the students in manageable groups to identify equipment and materials in first aid kit</p>	<ul style="list-style-type: none"> <li>• Identify accessories required in a first aid kit</li> <li>• Keep first aid kit accessories records</li> <li>• Replace used items or accessories</li> <li>• Check the kit after each use</li> </ul>		<p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintain first aid kit</p> <p><b>Principles:</b> The student should explain principles related to first aid kit</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Maintain first aid kit</li> <li>• Importance of first aid and first aid kit</li> <li>• Important accessories in the first aid kit with their function</li> <li>• How to maintain the first aid kit</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b> Carefulness is highly required in attending oozing fresh blood</p>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Thermometer</li> <li>• Stretcher</li> <li>• Crutches'</li> <li>• Surgical gloves</li> <li>• Forceps</li> <li>• Scissor</li> <li>• Iodine tincture</li> <li>• Hydrogen peroxide</li> <li>• Pain killers</li> <li>• Gloves</li> <li>• Bandage</li> <li>• Cotton wool</li> <li>• Spirit</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
3.0 Operating meat processing facility and machines	3.1 Operating stunning equipment	(a) Operating captive pistol bolt	<b>Brainstorm:</b> Guide the students to define captive bolt pistol, stunning, and restraining  <b>Demonstration</b> demonstrate to students to operate captive pistol bolt  <b>Practical work:</b> Guide the students to operate captive bolt pistol	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, animal, and safety</li> <li>• Restrain the animal</li> <li>• Identify parts of the captive bolt pistol</li> <li>• Assemble/reassemble captive pistol bolt</li> <li>• Perform stunning</li> <li>• Keep different records</li> <li>• Store tools and equipment</li> </ul>	Captive bolt pistol operated according to the required procedure	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate a captive bolt  <b>Principles:</b> The student should explain principles related to operations of the captive pistol bolt.  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Benefits of captive pistol bolt stunning method</li> <li>• How to restraining the animal</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Source of cartridges	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Stunning box</li> <li>• Live animal</li> <li>• Captive bolt pistol</li> <li>• Pen and notebook</li> </ul>	114
		(b) Operating pneumatic captive bolt	<b>Brainstorm:</b> Guide the students to define pneumatic captive bolt	<b>The students should be able to:</b>	Pneumatic captive bolt operated according to the	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>	This element can be achieved at a work place or training institution.	

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Demonstration</b> demonstrate to students to operate pneumatic captive bolt  <b>Practical work:</b> Guide the students to operate pneumatic captive bolt	<ul style="list-style-type: none"> <li>•Organize work tools, equipment, animal and safety</li> <li>•Restrain the animal at stunning box</li> <li>•Identify parts of the pneumatic captive bolt</li> <li>•Perform stunning</li> <li>•Keep different records</li> <li>•Store tools and equipment</li> </ul>	recommended procedure.	<b>Method used:</b> The students should explain how to operate pneumatic captive bolt  <b>Principles:</b> The student should explain principles related to operations of the pneumatic captive bolt  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•The reasons of doing stunning to animals using pneumatic captive bolt</li> <li>•The type of stunning</li> <li>•How to handle the pneumatic captive bolt</li> <li>•Perform stunning</li> </ul> <b>Circumstantial knowledge:</b>  <b>Detailed knowledge about:</b> Knowledge on operating compressor.	The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Stunning box</li> <li>•Live animal</li> <li>•Pneumatic captive bolt</li> <li>•Pen and note book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(c) Operating electrical stunning device	<b>Brainstorm:</b> Guide the students to define electrical stunning device  <b>Demonstration</b> demonstrate to students to operate electrical stunning device  <b>Practical work:</b> Guide the students to operate electrical stunning device	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, animal and safety</li> <li>• Restrain the animal at stunning box</li> <li>• Identify parts of the electrical stunning device</li> <li>• Perform stunning</li> <li>• Keep different records</li> <li>• Store tools and equipment</li> </ul>	Electrical stunning device is correctly operated	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to operate electrical stunning device.  <b>Principles:</b> The student should explain principles related to operations of the electrical stunning device  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• The reasons of doing stunning to animals using electrical stunning device</li> <li>• The type of stunning</li> <li>• How to handle the electrical stunning device</li> <li>• Perform stunning</li> </ul> <b>Circumstantial knowledge:</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Stunning box</li> <li>• Live animal</li> <li>• Electrical stunning device</li> <li>• Pen and note book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Detailed knowledge about:</b> Safety precautions in use of electrical devices		
		(d) Operating electrical water bath stunning device	<b>Brainstorm:</b> Guide the students to define electrical water bath stunning device  <b>ICT based learning</b> Guide the students to explore information about electrical water bath stunning device  <b>Practical work:</b> Guide the students to operate electrical water bath stunning device  <b>Field visit:</b> Organize the students in manageable groups to restrain an animal and identify the parts of the electrical water bath stunning device	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, animal and safety</li> <li>•Restrain the animal</li> <li>•Identify parts of the electrical water bath stunning device</li> <li>•Perform stunning</li> <li>•Keep different records</li> </ul>	Electrical water bath stunning device is correctly operated	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain operate electrical water bath stunning device  <b>Principles:</b> The student should explain principles related to electrical water bath stunning device  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•The reasons of doing stunning to animals using electrical water bath stunning device</li> <li>•The type of stunning</li> <li>•How to handle the electrical water</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Live animal</li> <li>•Electrical water bath stunning device</li> <li>•Pen and note book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						bath stunning device • Perform stunning <b>Circumstantial knowledge:</b> <b>Detailed knowledge about:</b> Limitations associated with the device		
		(e) Operating gaseous stunning boxes	<b>Brainstorm:</b> Guide the students to define gaseous stunning boxes <b>ICT based learning</b> Guide the students to explore information about gaseous stunning boxes <b>Practical work:</b> Guide the students to operate gaseous stunning boxes	<b>The students should be able to:</b> • Organize work tools, equipment, animal and safety • Restrain the animal • Identify parts of the gaseous stunning boxes • Perform stunning • Keep different records	Gaseous stunning boxes is well operated	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate gaseous stunning boxes <b>Principles:</b> The student should explain principles related reactions of gas in an animal body <b>Theories:</b> The students should explain: • The reasons of doing stunning to	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- • Cap or helmet. • Gumboots • Overall • Gaseous stunning boxes • Live animal • Gaseous stunning boxes • Pen and note book	

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				Process Assessment	Services Assessment	Knowledge Assessment		
						animals using gaseous stunning boxes  •The type of stunning  •How to handle the gaseous stunning boxes  •Perform stunning  <b>Circumstantial knowledge:</b>  <b>Detailed knowledge about:</b>  Safety precautions while operating the gaseous stunning box		
	3.2 Operating slaughter hall equipment	(a) Operating hoisting device	<b>Brainstorm:</b> Guide the students to define hoisting device  <b>Demonstration</b> demonstrate to students to operate hoisting device  <b>Practical work:</b> Guide the students to operate hoisting device	<b>The students should be able to:</b>  •Organize work tools, equipment, animal and safety gear  •Restrain the animal  •Identify parts of the hoisting device  •Operating hoisting device	Hoisting device operated as per the recommended procedure	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to operate hoisting device  <b>Principles:</b> The student should explain principles related to different commands for	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- •Cap or helmet.  •Gumboots  •Overall  •Stunning box  •Live animal	68

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				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Keep different records</li> </ul>		operating the device. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• How to handle the hoisting device</li> <li>• Importance of using hoisting device</li> <li>• Procedures of operating hoisting device</li> <li>• Cleaning after the uses</li> <li>• Maintaining the hoisting device</li> </ul> <b>Circumstantial knowledge:</b> <b>Detailed knowledge about:</b> Use of pulley where electrical hoisting devices are not available	<ul style="list-style-type: none"> <li>• Hoisting device</li> <li>• Pen and note book</li> </ul>	
		(b) Operating feet and head de hairing machine	<b>Brainstorm:</b> Guide the students to define feet and head dehairing machine, scalding	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> </ul>	Feet and head dehairing machine is correctly operated	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>	This element can be achieved at a work place or training institution.	

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<p><b>Demonstration</b> demonstrate to students to operate feet and head dehairing machine</p> <p><b>Practical work:</b> Guide the students to operate feet and head dehairing machine</p> <p><b>Field visit:</b> Organize the students in manageable groups to identify the parts of feet and head dehairing machine</p>	<ul style="list-style-type: none"> <li>• Bring the feet and heads</li> <li>• Identify parts of the feet and head dehairing machine</li> <li>• Operating feet and head dehairing machine</li> <li>• Keep different records</li> </ul>		<p><b>Method used:</b> The students should explain how to operate feet and head de hairing machine</p> <p><b>Principles:</b> The students must explain principles scalding and dehairing processes</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• How to handle the feet and head dehairing machine</li> <li>• Procedures of operating feet and head dehairing machine</li> <li>• Cleaning after the uses</li> <li>• Maintaining the feet and head dehairing machine</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Feet and heads</li> <li>• Feet and head dehairing machine</li> <li>• Water</li> <li>• Pen and note book</li> <li>• Aluminium table,</li> <li>• Knives,</li> <li>• Sanitary agents</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
						On pressure, and other machine parameters		
		(c) Operating stomach/tripe cleaning machine	<p><b>Brainstorm:</b> Guide the students to define tripe, pouch</p> <p><b>Demonstration</b> demonstrate to students to operate stomach/tripe cleaning machine</p> <p><b>Practical work:</b> Guide the students to operate stomach/tripe cleaning machine</p> <p><b>Site visit:</b> Organize the students in manageable groups to identify the parts of stomach/tripe cleaning machine</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the stomach/tripe</li> <li>•Identify parts of the stomach/tripe cleaning machine</li> <li>•Operating stomach/tripe cleaning machine</li> <li>•Keep different records</li> </ul>	Stomach/tripe cleaning machine operated as per the recommended procedure	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Operate stomach/tripe cleaning machine</p> <p><b>Principles:</b> The students must explain principles of cleaning tripe</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•How to handle the stomach/tripe cleaning machine</li> <li>•Procedures of operating stomach/tripe cleaning machine</li> <li>•Cleaning after the uses</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Stomach/tripe</li> <li>•Stomach/tripe cleaning machine</li> <li>Water</li> <li>•Pen and note book</li> <li>•Aluminium table,</li> <li>•Knives,</li> <li>•Sanitary agents</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Maintaining the stomach/tripe cleaning machine</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <p>Safety precautions while working with the equipment</p>		
	3.3 Operating dressing equipment	(a) Operating dehiding machine	<p><b>Brainstorm:</b></p> <p>Guide the students to define dehiding machine, hide, skin</p> <p><b>Demonstration</b></p> <p>demonstrate to students to operate dehiding machine</p> <p><b>Practical work:</b></p> <p>Guide the students to operate dehiding machine</p> <p><b>Site visit:</b></p> <p>Organize the students in manageable groups to identify the parts of dehiding machine</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the bled animal</li> <li>•Identify parts of the dehiding machine</li> <li>•Operating dehiding machine</li> <li>•Keep different records</li> </ul>	Dehiding machine operated as per the recommended procedure	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to operate de hiding machine:</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•How to handle the dehiding machine</li> <li>•Identify different types of dehiding machine</li> <li>•Procedures of operating dehiding machine</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Bled animal</li> <li>•Dehiders</li> <li>•Pen and note book</li> <li>•Knives</li> <li>•Overhead rail</li> </ul>	68

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Cleaning after the uses</li> <li>•Maintaining the dehiding machine</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <p>Safety precautions while operating the machine.</p>		
		(b) Performing operation of plucking machine	<p><b>Brainstorm:</b></p> <p>Guide the students to define plucking machine</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to identify the parts of plucking machine</p> <p><b>Demonstration:</b></p> <p>demonstrate to students to operate plucking machine</p> <p><b>Practical work:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the bled poultry</li> <li>•Identify parts of the plucking machine</li> <li>•Operating plucking machine</li> <li>•Keep different records</li> <li>•Clean the plucking machine</li> </ul>	Plucking machine operated as per the recommended procedure	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to operate plucking machine</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•How to handle the plucking machine</li> <li>•Identify parts of plucking machine</li> <li>•Procedures of operating plucking machine</li> </ul>	<p>The following tools, This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Bled poultry</li> <li>•Plucking machine</li> <li>•Pen and note book</li> <li>•Knives</li> <li>•Heater,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students to operate plucking machine			<ul style="list-style-type: none"> <li>•Cleaning after the uses</li> <li>•Maintaining the plucking machine</li> </ul>	<ul style="list-style-type: none"> <li>•Charcoal cooker,</li> <li>•Water,</li> <li>•Basis/crates,</li> <li>•Aluminium table,</li> <li>•Sanitary agents</li> </ul>	
		(c) Operating pig scalding and dehairing equipment	<p><b>Brainstorm:</b> Guide the students to define pig scalding and pig dehairing</p> <p><b>Discussion:</b> Organize the students in manageable groups to identify the parts of scalding and de hairing equipment</p> <p><b>Demonstration:</b> demonstrate to students to operate scalding and dehairing equipment</p> <p><b>Practical work:</b> Guide the students to operate the pig scalding and dehairing equipment</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the bled pig</li> <li>•Switch on the pig scalding and dehairing equipment</li> <li>•Perform scalding</li> <li>•Perform de hairing</li> <li>•Keep different records</li> <li>•Clean the pig scalding and dehairing equipment</li> </ul>	Pig scalding and dehairing equipment is well operated	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate pig scalding and de hairing equipment: <b>Principles:</b> The trainee should explain principles involved in operating scalding and de hairing equipment <b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•Advantages of using pig scalding and dehairing equipment</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Bled pig</li> <li>•Pen and note book</li> <li>•Heater,</li> <li>•Charcoal cooker,</li> <li>•Water,</li> <li>•Aluminium table,</li> <li>•Scalding/de haring machine;</li> <li>•Hooks,</li> <li>•Shackling chain,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•How to handle the pig scalding and dehairing equipment</li> <li>•Identify parts of pig scalding and dehairing equipment</li> <li>•Procedures of operating pig scalding and de-hairing equipment</li> <li>•Cleaning after the uses</li> <li>•Maintaining the plucking machine</li> </ul> <p><b>Circumstantial knowledge:</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Chemical dehairing</li> <li>•Enzymatic dehairing</li> </ul>	<ul style="list-style-type: none"> <li>•Stunning equipment,</li> <li>•Sticking knife</li> </ul>	
		(d) Operating pig singeing machine	<p><b>Brainstorm:</b></p> <p>Guide the students to define pig singeing</p> <p><b>Demonstration:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> </ul>	Pig singeing machine is correctly operated	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>demonstrate to students to operate singeing machine</p> <p><b>Practical work:</b> Guide the students to operate the pig singeing machine</p>	<ul style="list-style-type: none"> <li>• Bring the de-haired pig</li> <li>• Identify parts of the pig singeing machine</li> <li>• Operating pig singeing machine</li> <li>• Keep different records</li> </ul>		<p>explain how to operate pig singeing machine</p> <p><b>Theories:</b> The student should explain</p> <ul style="list-style-type: none"> <li>• Advantages of using pig singeing machine</li> <li>• How to handle the pig singeing machine</li> <li>• Identify parts of pig singeing machine</li> <li>• Procedures of operating pig singeing machine</li> <li>• Maintaining the pig singeing machine</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b> Costs and experts for maintaining the machine</p>	<p>safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• De-haired pig</li> <li>• Pen and note book</li> <li>• Aluminium table,</li> <li>• Singeing machine;</li> <li>• Hooks,</li> <li>• Gas cylinders,</li> <li>• Meat trays,</li> <li>• Trolleys</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
	3.4 Operating meat cutting machines	(a) Operating brisket saw	<p><b>Brainstorm:</b> Guide the students to define brisket saw</p> <p><b>Discussion:</b> Organize the students in manageable groups to identify the parts of brisket saw</p> <p><b>Demonstration:</b> demonstrate to students to operate brisket saw</p> <p><b>Practical work:</b> Guide the students to operate the brisket saw</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the carcass</li> <li>•Identify parts of the brisket saw</li> <li>•Operating brisket saw</li> <li>•Keep different records</li> <li>•Clean the brisket saw after the uses</li> </ul>	Brisket saw is well operated as per instructions	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate brisket saw</p> <p><b>Principles:</b> The students should explain the principle of operating brisket saw</p> <p><b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>•Advantages of using brisket saw than using bush knife</li> <li>•How to handle the brisket saw</li> <li>•Identify parts of brisket saw</li> <li>•Procedures of operating brisket saw</li> <li>•Maintaining the brisket saw</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•brisket saw</li> <li>•Carcass of meat</li> <li>•Pen and note book</li> <li>•Aluminium table,</li> <li>•Hooks</li> <li>•Overhead rail,</li> <li>•Sterilizer,</li> <li>•Washing basin,</li> <li>•Knife</li> </ul>	92

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(b) Operating splitting saw	<b>Brainstorm:</b> Guide the students to define splitting saw <b>Discussion:</b> Organize the students in manageable groups to identify the splitting saw <b>Demonstration:</b> demonstrate to students to operate splitting saw <b>Practical work:</b> Guide the students to operate the splitting saw	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Bring the carcass</li> <li>• Identify parts and types of the splitting saw</li> <li>• Operating splitting saw</li> <li>• Keep different records</li> <li>• Clean the splitting saw after the uses</li> </ul>	Splitting saw correctly operated as per instructions	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate splitting saw <b>Principles:</b> The students should explain the principle of operating splitting saw <b>Theories:</b> The students should explain procedures involved in:- <ul style="list-style-type: none"> <li>• How to handle the splitting saw</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Splitting saw</li> <li>• Carcass of meat</li> <li>• Pen and note book</li> <li>• Aluminium table,</li> <li>• Hooks</li> <li>• Overhead rail,</li> <li>• Sterilizer,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Identify parts and types of splitting saw</li> <li>•Procedures of operating splitting saw</li> <li>•Maintaining the splitting saw</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Meat handling</li> <li>•Power supply</li> <li>•Model of the machine</li> </ul>	<ul style="list-style-type: none"> <li>•Washing basin,</li> <li>•Knife</li> </ul>	
		(c) Operating band saw	<b>Brainstorm:</b> Guide the students to define band saw <b>Group discussion:</b> Organize the students in manageable groups to identify the band saw <b>Demonstration:</b> demonstrate to students to operate band saw	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the chilled carcass</li> <li>•Identify parts of the band saw</li> <li>•Operating band saw</li> <li>•Keep different records</li> </ul>	The band saw correctly operated as per instructions	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate band saw <b>Principles:</b> The students should explain the principle of operating band saw	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•band saw</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b> Guide the students to operate the band saw	<ul style="list-style-type: none"> <li>• Clean the band saw after the uses</li> </ul>		<b>Theories:</b> The students should explain procedures involved in:- <ul style="list-style-type: none"> <li>• How to handle the band saw</li> <li>• Identify parts of band saw</li> <li>• Procedures of operating band saw</li> <li>• Maintaining the band saw</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>	<ul style="list-style-type: none"> <li>• Chilled meat</li> <li>• Pen and note book</li> <li>• Aluminium table,</li> <li>• Hooks</li> <li>• Overhead rail,</li> <li>• Sterilizer,</li> <li>• Washing basin,</li> <li>• Knife</li> </ul>	
		(d) Operating a meat slicer	<b>Brainstorm:</b> Guide the students to define meat slicer, smoked meat, deli meat  <b>Group discussion:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Bring the meat to be sliced</li> </ul>	A meat slicer well operated as per instructions	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate meat slicer	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Organize the students in manageable groups to identify the meat slicer</p> <p><b>Demonstration:</b> demonstrate to students to operate meat slicer</p> <p><b>Practical work:</b> Guide the students to operate the meat slicer</p> <p><b>Activity:</b> Organize the students in manageable groups to identify the parts and types of meat slicer</p>	<ul style="list-style-type: none"> <li>•Identify parts and types of the meat slicer</li> <li>•Operating meat slicer</li> <li>•Keep different records</li> <li>•Clean the meat slicer after the uses</li> </ul>		<p><b>Principles:</b> The students should explain the principle of assembling meat slicer</p> <p><b>Theories:</b> The students should explain procedures involved in: -</p> <ul style="list-style-type: none"> <li>•How to handle the meat slicer</li> <li>•Procedures of operating meat slicer</li> <li>•Maintaining the meat slicer</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Meat handling</li> <li>•Power supply</li> <li>•Model of the machine</li> </ul>	<ul style="list-style-type: none"> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Meat slicer</li> <li>•Meat</li> <li>•Pen and note book</li> <li>•Aluminium table,</li> <li>•Hooks</li> <li>•Overhead rail,</li> <li>•Sterilizer,</li> <li>•Washing basin,</li> <li>•Knife</li> </ul>	
	3.5 Operating meat tenderizing machines	(a) Operating chiller equipment	<b>Brainstorm:</b>	<b>The students should be able to:</b>	Chiller equipment operated as per the recommended procedure	<b>Knowledge evidence:</b>	This element can be achieved at a work place or training institution.	92

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Guide the students to define tenderness, chilling and freezing.</p> <p><b>Activity:</b> Organize the students in manageable groups to identify different parts of chiller equipment</p> <p><b>Group discussion:</b> Organize the students in manageable groups to identify the chiller equipment</p> <p><b>Demonstration:</b> demonstrate to students to operate chiller equipment</p> <p><b>Practical work:</b> Guide the students on how to chill carcasses</p>	<ul style="list-style-type: none"> <li>•Identify different parts of chiller equipment</li> <li>•Prepare carcasses for chilling</li> <li>•Switch on the chiller equipment</li> <li>•Monitor temperature of chiller equipment</li> <li>•Clean chiller equipment</li> </ul>		<p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to operate chiller equipment</p> <p><b>Principles:</b> The students should explain the principle of operating chiller equipment</p> <p><b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>•Prepare chiller equipment</li> <li>•Prepare carcasses</li> <li>•Switch on and set chiller temperature</li> <li>•Check internal temperature of meat.</li> <li>•Clean chiller equipment</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Meat handling</li> </ul>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Aluminium table,</li> <li>•Hooks,</li> <li>•Warm meat or carcasses,</li> <li>•Cold protective gear,</li> <li>•Weighing scale,</li> <li>•Ledger book.</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Power supply</li> <li>•Model of the machine</li> </ul>		
		(b) Operating manual meat hammer (pounder)	<p><b>Discussion:</b> Guide the students to discuss flat pyramid-shape, potato masher pyramid –shape and blade meat tenderizers</p> <p><b>Practical work:</b> Guide the students on how to tenderize meat by using the three types of manual hammers</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Identify the three types of manual meat hammers</li> <li>•Tenderize meat by using flat pyramid-shape pounder</li> <li>•Tenderize meat by using potato masher pyramid – shape pounder</li> <li>•Tenderize meat by using blade meat pounder.</li> <li>•Clean and store meat ponders</li> </ul>	Manual meat pounder efficiently used to tenderize meat correctly as per instructions	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate manual meat hammer (pounder) <b>Principles:</b> The students should explain the principles of operating manual meat hammers (pounder) <b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>•Prepare meat</li> <li>•Identify and prepare the meat pounder</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Aluminium table</li> <li>•Chopping board</li> <li>•Meat crate</li> <li>•Meat hammer</li> <li>•Wrapping materials</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Pound the piece of meat</li> <li>• Clean meat hammers.</li> <li>• Circumstantial knowledge</li> <li>• Detailed knowledge about:</li> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(c) Operating meat tumbling equipment	<p><b>Brainstorm:</b> Guide the students to explain the meaning of tumbling.</p> <p><b>Group discussion:</b> Organize the students in manageable groups to identify the meat tumbling equipment</p> <p><b>Demonstration:</b> demonstrate to students to operate meat tumbling equipment</p> <p><b>Practical work:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify parts of meat tumbling equipment</li> <li>• Prepare meat for tumbling process</li> <li>• Marinate meat</li> <li>• Switch on to perform tumbling</li> <li>• Remove the marinated meat</li> <li>• Clean and store meat ponders</li> </ul>	Meat tumbling equipment operated as per the recommended procedure	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to operate meat tumbling equipment</p> <p><b>Principles:</b> The students should explain the principle of disassembling of meat tumbling equipment</p> <p><b>Theories:</b> The students should explain procedures involved in:-</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Tumbling machine;</li> <li>• Aluminium table,</li> <li>• Hooks,</li> <li>• Chilled meat,</li> <li>• Weighing scale</li> <li>• Spices,</li> <li>• Meat crates</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students on how to operate meat tumbling equipment.			<ul style="list-style-type: none"> <li>• Make recipe for marination</li> <li>• Prepare meat tumbling equipment</li> <li>• Operate meat tumbling equipment</li> <li>• Clean meat tumbling equipment</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(d) Operating brine injector pump	<p><b>Brainstorm:</b></p> <p>Guide the students to define and identify types of brine injectors.</p> <p><b>Demonstration:</b></p> <p>demonstrate to students to operate</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify different types of brine injector</li> <li>• Prepare meat cuts for brining</li> <li>• Prepare brine solution</li> </ul>	Brine injector pump operated as per the recommended procedure	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to operate brine injector pump</p> <p><b>Principles:</b> The students should</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Manual brine injector;</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			brine injector pump equipment <b>Practical work:</b> Guide the students on how to operate different types of brine injectors	<ul style="list-style-type: none"> <li>• Prepare brine injector</li> <li>• Suck brine solution</li> <li>• Inject brine solution to the meat cut</li> <li>• Clean brine injector</li> </ul>		explain the principle of operating different brine injector pumps  <b>Theories:</b> The students should explain procedures involved in:-  <ul style="list-style-type: none"> <li>• Make recipe for marination</li> <li>• Prepare brine injector</li> <li>• Inject brine solution to the meat cut</li> <li>• Clean meat brine injectors</li> </ul> <b>Circumstantial knowledge</b>  <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>	<ul style="list-style-type: none"> <li>• Aluminium table,</li> <li>• Bucket,</li> <li>• Brine solution</li> <li>• Meat crate</li> </ul>	
	3.6 Operating meat blenders	(a) Operating mincer equipment	<b>Brainstorm:</b> Guide the students to define mincer, sausage,	<b>The students should be able to:</b>	Mincer equipment operated as per the recommended procedure	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b>	This element can be achieved at a work place or training institution.	68

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>comminution/mincing</p> <p><b>Demonstration:</b> demonstrate to students to operate mincer equipment</p> <p><b>Practical work:</b> Guide the students to operate the mincer equipment, dismantle the mincer ready to clean, assemble the mincer ready to be used</p> <p><b>Activity:</b> Organize the students in manageable groups to identify the parts and types of mincer equipment</p>	<ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Secure the meat for mincing</li> <li>•Identify parts and types of the meat mincer</li> <li>•Operating meat slicer</li> <li>•dismantle the mincer ready to clean,</li> <li>•assemble the mincer ready to be used</li> <li>•Keep different records</li> </ul>		<p><b>Method used:</b> The students should explain how to operate mincer equipment</p> <p><b>Principles:</b> The students should explain the principle of assembling/disssembling mincer equipment</p> <p><b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>•How to handle the meat mincer</li> <li>•Identify parts and types of mincer</li> <li>•Procedures of operating meat mincer</li> <li>•Dismantle the mincer ready to clean,</li> <li>•Assemble the mincer ready to be used</li> <li>•Maintaining the meat mincer</li> </ul>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Weigh scale</li> <li>•Chopping board</li> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•Meat mincer</li> <li>•Meat</li> <li>•Pen and note book</li> <li>•Aluminium table,</li> <li>•Sterilizer,</li> <li>•Washing basin,</li> <li>•Knife</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(b) Operating bowl chopper	<b>Brainstorm:</b> Guide the students to define bowl chopper <b>Demonstration:</b> Demonstrate to students to operate bowl chopper <b>Practical work:</b> Guide the students to operate the bowl chopper	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Bring the meat to be chopped</li> <li>• Identify parts of the bowl chopper</li> <li>• Operating bowl chopper</li> <li>• Keep different records</li> <li>• Clean the bowl chopper</li> </ul>	Bowl chopper operated as per the recommended procedure	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate bowl chopper <b>Principles:</b> The students should explain the principle of maintaining temperature while operating a bowl chopper <b>Theories:</b> The students should explain procedures involved in:- <ul style="list-style-type: none"> <li>• Advantages and disadvantages of bowl chopper</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Weigh scale</li> <li>• Chopping board</li> <li>• Cap or helmet.</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Bowl chopper</li> <li>• Meat</li> <li>• Pen and note book</li> <li>• Aluminium table,</li> <li>• Sterilizer,</li> <li>• Washing basin,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•How to handle the meat mincer</li> <li>•Identify parts of bowl chopper</li> <li>•Procedures of operating bowl chopper</li> <li>•Cleaning the bowl chopper</li> <li>•Maintaining the bowl chopper</li> <li>•Circumstantial knowledge</li> <li>•Detailed knowledge about:</li> <li>•Meat handling</li> <li>•Power supply</li> <li>•Model of the machine</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Knowledge on Emergency stop mechanism of the machine</p>	•Knife	
		(c) Operating meat mixer equipment	<b>Brainstorm:</b> Guide the students to define meat mixer	<b>The students should be able to:</b>	Meat mixer operated as per the	<b>Knowledge evidence:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Demonstration:</b> demonstrate to students to operate meat mixer equipment  <b>Practical work:</b> Guide the students to operate the meat mixer	<ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Bring the meat to be mixed</li> <li>•Identify parts of the meat mixer</li> <li>•Operating meat mixer</li> <li>•Keep different records</li> <li>•Clean the meat mixer</li> </ul>	recommended procedure	<b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate meat mixer equipment <b>Principles:</b> The students should explain the principle of assembling meat mixer equipment <b>Theories:</b> The students should explain procedures involved in:- <ul style="list-style-type: none"> <li>•Advantages of meat mixer</li> <li>•How to handle the meat mixer</li> <li>•Identify parts of meat mixer</li> <li>•Procedures of operating meat mixer</li> <li>•Cleaning the meat mixer</li> <li>•Maintaining the meat mixer</li> </ul> <b>Circumstantial knowledge</b>	place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Weigh scale</li> <li>•Chopping board</li> <li>•Cap or helmet.</li> <li>•Gumboots</li> <li>•Overall</li> <li>•meat mixer</li> <li>•Meat</li> <li>•Pen and note book</li> <li>•Aluminium table,</li> <li>•Sterilizer,</li> <li>•Washing basin,</li> <li>•Knife</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
	3.7 Operating meat packaging machines	(a) Operating seal machine	<b>Discussion:</b> Guide the students to explain vacuum and heat sealing packaging machines  <b>Demonstration:</b> demonstrate to students to operate seal machine  <b>Practical work:</b> Guide the students on how to operate both vacuum and heat sealing machines	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify different types of seal machine</li> <li>• Prepare meat cuts for packaging</li> <li>• Prepare seal machine</li> <li>• Insert meat cut into packaging materials</li> <li>• Seal packed meat</li> <li>• Clean seal machine</li> </ul>	Meat and meat products sealer operated as per the recommended standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate seal machine.  <b>Principles:</b> The students should explain the principle of:- operating seal machine  <b>Theories:</b> The students should explain procedures involved in:- <ul style="list-style-type: none"> <li>• Prepare meat cut for packaging</li> <li>• Operate vacuum sealing machine</li> <li>• Operate heat sealing machine</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Vacuum sealing machine,</li> <li>• Food grade plastic bags,</li> <li>• Meat cuts and</li> <li>• Aluminium table</li> </ul>	68

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Clean sealing machines.</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(b) Operating wrapping machines	<b>Brainstorm:</b> Guide the students to define wrapping machines <b>Demonstration:</b> Demonstrate to students to operate wrapping machines <b>Practical work:</b> Guide the students on how to operate wrapping machines	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify different parts of wrapping machine.</li> <li>• Prepare meat cuts for wrapping</li> <li>• Prepare wrapping machine</li> <li>• Put meat cut into a meat plate</li> <li>• Wrap the plate which contains meat cut</li> <li>• Seal the wrapped meat</li> </ul>	Meat and meat products wrapped as per the recommended standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to operate wrapping machine <b>Principles:</b> The students should explain the principle of operating wrapping machine <b>Theories:</b> The students should explain procedures involved in:-	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Wrapping machine,</li> <li>• meat cuts,</li> <li>• Plastic plate and</li> <li>• Wrapping foil</li> <li>• Aluminium table.</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Clean wrapping machines</li> </ul>		<ul style="list-style-type: none"> <li>• Important of using wrapping machine</li> <li>• Prepare meat for wrapping</li> <li>• Prepare wrapping machine</li> <li>• Operate wrapping machine</li> <li>• Clean wrapping machine</li> <li>• Circumstantial knowledge</li> <li>• Detailed knowledge about:</li> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>		
		(c) Operating sausage filler machine	<b>Brainstorm:</b> Guide the students to define sausage filler machine and casing  <b>Demonstration:</b> Demonstrate to students to operate sausage filler machine  <b>Practical work:</b>	<b>The students should be able to</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Bring the meat</li> <li>• Identify parts and types of the sausage filler machine</li> </ul>	Sausage filler machine operated as per the recommended procedure.	<b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to operate sausage filler machine  <b>Principles:</b> The students should	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• sausage filler machine</li> <li>• meat cuts,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students on how to operate sausage filler machine	<ul style="list-style-type: none"> <li>• Operating sausage filler machine</li> <li>• Keep different records</li> <li>• Clean the sausage filler machine</li> </ul>		<p>explain the principle of assembling sausage stuffing tubes</p> <p><b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>• Important of using sausage filler machine</li> <li>• Prepare meat for sausage</li> <li>• Prepare sausage filler machine</li> <li>• Operate heat sausage filler machine</li> <li>• Clean sausage filler machine</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Meat handling</li> <li>• Power supply</li> <li>• Model of the machine</li> </ul>	<ul style="list-style-type: none"> <li>• Sausage casing</li> <li>• Aluminium table.</li> </ul>	



## Form Two

**Table 4:** *Detailed Contents for Form Two*

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
1.0 Maintaining quality of slaughter stock	1.1 Classifying slaughter stock	(a) Determining age of live animals	<p><b>Brainstorm:</b></p> <p>Guide the students to define dentition</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to discuss methods of ageing animals</p> <p><b>Practical work:</b></p> <p>Guide the students on how to determine age of live animals</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Put identification mark on slaughter stock</li> <li>•Arrange different species into classes</li> <li>•Restraining different species of animals</li> <li>•Determine age of different species of animals</li> </ul>	The age of animals is determined close to the point.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to determine age of different species of animals</p> <p><b>Principles:</b> The students should explain the principle of:-</p> <ul style="list-style-type: none"> <li>•Restraining different species of animals</li> <li>•Determining age of different species of animals</li> <li>•Theories: The students should explain procedures involved in:-</li> <li>•Important of restraining</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Different species of animals</li> <li>•Weighing scale</li> <li>•Record book</li> <li>•Rope</li> <li>•Crash</li> <li>•Cage</li> <li>•Coaxer</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Cap or helmet</li> <li>•Gloves</li> <li>•Protective eye glasses</li> </ul>	41

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						different species of animals • Essence of determining age of different species of animals <b>Circumstantial knowledge</b>  <b>Detailed knowledge about:</b>  • Animal behaviour • Anatomy of the animal body • Safety handling of tools and equipment		
		(b) Determining weight of slaughter stock	<b>Brainstorm:</b>  Guide the students to define live weight  <b>Group discussion:</b>  Organize the students in manageable groups to discuss methods	<b>The students should be able to:</b> • Organize work tools, equipment, utensils and safety gear • Put identification mark on slaughter stock • Arrange different species into classes	The weight of animals determined close to the point	Knowledge <b>evidence:</b>  <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine weight of different species of animals	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- • Different species of animals • Weighing bridge • Weighing scale	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>of weight estimation of live animals</p> <p><b>Demonstration</b></p> <p>Demonstrate how to determine the weight of live animals</p> <p><b>Practical work:</b></p> <p>Guide the students on how to determine weight of live animals</p>	<ul style="list-style-type: none"> <li>• Restrain different species of animals</li> <li>• Determine the weight of different species of animals</li> </ul>		<p><b>Principles:</b> The students should explain the principle of:-</p> <ul style="list-style-type: none"> <li>• Restraining different species of animals</li> <li>• Determining weight of different species of animals</li> </ul> <p><b>Theories:</b> The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>• Important of restraining different species of animals</li> <li>• Essence of determining weight of different species of animals</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal behaviour</li> <li>• Anatomy of the animal body</li> </ul>	<ul style="list-style-type: none"> <li>• Weighing band</li> <li>• Record book</li> <li>• Rope</li> <li>• Crash</li> <li>• Cage</li> <li>• Coaxer</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Gloves</li> <li>• Protective eye glasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Safety handling of tools and equipment</li> </ul>		
	1.2 Categorizing and grading live animals and birds	(a) Categorizing and Grading of cattle	<p><b>Brainstorm:</b></p> <p>Guide the students to define grading</p> <p><b>Farm visit:</b></p> <p>Organize the students in manageable groups to identify different cattle for grading</p> <p><b>Practical work:</b></p> <p>Guide the students on how to categorizing and grading of cattle</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Restrain different species of animals</li> <li>• Categorize cattle,</li> <li>• Grade cattle,</li> <li>• Mark animals according to grade</li> <li>• Keep different farm records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> <li>• Observe health and safety precautions</li> </ul>	Cattle categorized and graded according to set standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to categorize and grade cattle</p> <p><b>Principles:</b> The students should explain the principles of:-</p> <ul style="list-style-type: none"> <li>• Categorizing cattle</li> <li>• Grading cattle</li> </ul> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Importance of categorizing and grading of cattle</li> <li>• Application of categories and Grades in cattle</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal behaviour</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Coaxer</li> <li>• Markers</li> <li>• Different species of animals</li> <li>• Record book</li> <li>• Rope</li> <li>• Crash</li> <li>• Cage</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Cap</li> </ul>	82

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>Anatomy of the animal body</li> </ul>		
		(b) Categorizing and Grading of sheep and goats	<p><b>Brainstorm:</b></p> <p>Guide the students to define grading</p> <p><b>Farm visit:</b></p> <p>Organize the students in manageable groups to identify different sheep and goats for grading</p> <p><b>Practical work:</b></p> <p>Guide the students on how to categorizing and grading of sheep and goats</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Organize work tools, equipment, utensils and safety gear</li> <li>Restrain different species of animals</li> <li>Categorize sheep and goats</li> <li>Grade sheep and goats</li> <li>Mark animals according to grade</li> <li>Keep different farm records</li> <li>Clean tools, equipment and workplace</li> <li>Store tools and equipment</li> <li>Observe health and safety precautions</li> </ul>	<p><b>Sheep</b> and goats are categorized and graded according to set standards.</p>	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to categorize and grade sheep and goats</p> <p><b>Principles:</b> The students should explain the principles of:-</p> <ul style="list-style-type: none"> <li>Categorizing sheep and goats</li> <li>Grading sheep and goats</li> </ul> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>Importance of categorizing and grading of sheep and goats</li> <li>Application of categories and Grades in sheep and goats</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>Coaxer</li> <li>Markers</li> <li>Different species of animals</li> <li>Record book</li> <li>Rope</li> <li>Crash</li> <li>Cage</li> <li>Gum boots</li> <li>Overall</li> <li>Cap</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Animal behaviour</li> <li>• Anatomy of the animal body</li> </ul>		
		(c) Categorizing and Grading of pigs	<b>Brainstorm:</b> Guide the students to define grading  <b>Farm visit:</b> Organize the students in manageable groups to identify different pigs for grading  <b>Practical work:</b> Guide the students on how to categorizing and grading of pigs	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Restrain different species of animals</li> <li>• Categorize pigs</li> <li>• Grade pigs</li> <li>• Mark animals according to grade</li> <li>• Keep different farm records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	Pigs categorized and graded according to set standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to categorize and grade pigs <b>Principles:</b> The students should explain the principles of:- <ul style="list-style-type: none"> <li>• Categorizing pigs</li> <li>• Grading pigs</li> </ul> <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of categorizing and grading of pigs</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Coaxer</li> <li>• Markers</li> <li>• Different species of animals</li> <li>• Record book</li> <li>• Rope</li> <li>• Crash</li> <li>• Cage</li> <li>• Gum boots</li> <li>• Overall</li> <li>• Cap</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>Observe health and safety precautions</li> </ul>		<ul style="list-style-type: none"> <li>Application of categories and Grades in pigs</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>Animal behaviour</li> <li>Anatomy of the animal body</li> </ul>		
		(d) Categorizing and Grading of poultry	<p><b>Brainstorm:</b></p> <p>Guide the students to define grading</p> <p><b>Poultry unit visit:</b></p> <p>Organize the students in manageable groups to identify different poultry for grading</p> <p><b>Practical work:</b></p> <p>Guide the students on how to categorizing and grading of poultry</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Organize work tools, equipment, utensils and safety gear</li> <li>Restrain poultry</li> <li>Categorize poultry</li> <li>Grade poultry</li> <li>Mark animals according to grade</li> <li>Keep different farm records</li> <li>Clean tools, equipment and workplace</li> </ul>	Poultry categorized and graded according to set standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to categorize and grade poultry</p> <p><b>Principles:</b> The students should explain the principles of:-</p> <ul style="list-style-type: none"> <li>Categorizing poultry</li> <li>Grading poultry</li> </ul> <p><b>Theories:</b> The students should explain:</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>Coaxer</li> <li>Markers</li> <li>Different species of animals</li> <li>Record book</li> <li>Rope</li> <li>Crash</li> <li>Cage</li> <li>Gum boots</li> <li>Overall</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>•Store tools and equipment</li> <li>•Observe health and safety precautions</li> </ul>		<ul style="list-style-type: none"> <li>•Importance of categorizing and grading of poultry</li> <li>•Application of categories and Grades in poultry</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Animal behaviour</li> <li>•Anatomy of the animal body</li> </ul>	<ul style="list-style-type: none"> <li>•Cap</li> </ul>	
	1.3 Transporting slaughter animals	(a) Loading and unloading slaughter animals	<p><b>Brainstorm:</b></p> <p>Guide the students to define livestock health movement permits and loading/unloading ramp</p> <p><b>Discussion:</b> Guide the students to discuss methods or types of loading and unloading ramps</p> <p><b>Practical work:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Select vehicle</li> <li>•Inspect body the vehicle</li> <li>•Check on validity of required legal document</li> <li>•Check health of animals</li> <li>•Minimize the slippery of the vehicle's floor</li> </ul>	Slaughter animals loaded and offloaded according to the set standards.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to load and unload slaughter animals</p> <p><b>Principles:</b> The students should explain the principle of checking the</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Gum boots</li> <li>•Overall</li> <li>•Cap or helmet</li> <li>•Coaxer</li> <li>•Different species of animals</li> <li>•Record book</li> </ul>	61

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Visit the nearby ramp and guide the students on how to load and unload slaughter animals			<p>health status of animals.</p> <p>Theories: The students should explain procedures involved in:-</p> <ul style="list-style-type: none"> <li>• Loading of animals and poultry</li> <li>• Offloading of animals and poultry</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal behaviour</li> <li>• Animal welfare Acts and its Regulations</li> </ul>		
		(b) Trekking slaughter animals	<p><b>Brainstorm:</b></p> <p>Guide the students to define stock routes, night camps, cattle auction and herd</p> <p><b>Discussion:</b> Guide the students to</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Check validity of the required legal documents</li> <li>• Check health condition of animals</li> <li>• Mark animals</li> </ul>	Slaughter trekked according to the set standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to trek slaughter animals</p> <p><b>Principles:</b> The students should</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>discuss advantages and disadvantages of trekking.</p> <p><b>Holding ground visit:</b></p> <p>Visit the nearby livestock holding ground or secondary livestock market and observe the trekking process</p>			<p>explain the principle of trekking animals.</p> <p><b>Theories:</b> The students should explain procedures involved in trekking different animals species and categories</p> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal behaviour</li> <li>• Animal welfare Acts and its Regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Coaxer</li> <li>• Different species of animals</li> <li>• Livestock health movement permit</li> <li>• Record book</li> <li>• Mobile phone,</li> <li>• Stock route, first aid kit,</li> <li>• Night camp</li> <li>• Water troughs</li> </ul>	
		(c) Trucking slaughter animal	<p><b>Brainstorm:</b></p> <p>Guide the students to define truck trucking, trailer and train wagon</p> <p><b>Discussion:</b> Guide the students to discuss advantages and disadvantages of trucking</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Determine number of slaughter animals to be trucked</li> <li>• Check health of animals</li> <li>• Minimize the slippery of the vehicle's floor.</li> <li>• Monitor trend of driving</li> </ul>	Slaughter trucked according to the set standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to truck slaughter animals</p> <p><b>Principles:</b> The students should explain the principle involved in driving an animal truck</p> <p><b>Theories:</b> The students should</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Truck,</li> <li>• Loading ramp,</li> <li>• Coaxer,</li> <li>• Partitioning materials (timber or tree poles),</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Loading/unloading ramp visit:</b>  Visit the nearby livestock holding ground or secondary livestock market and observe the trucking process			explain procedures involved in trucking different animal species <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Handling fracture accidents.</li> <li>• Handling animal truck breakdown</li> </ul>	<ul style="list-style-type: none"> <li>• Saw dust or rice husks,</li> <li>• Ropes</li> </ul>	
	1.4 Managing slaughter animals in a holding ground and lairage	(a) Registering slaughter animals	<b>Discussion:</b> Guide the students to discuss advantages of registration for slaughter animals  <b>Field visit:</b>  Visit the nearby livestock holding ground or secondary livestock market and participate in registration of slaughter animals	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Verify livestock movement permit details in relation to actual situation.</li> <li>• Register received and moving out slaughter animals</li> <li>• Mark animals</li> </ul>	Slaughter animals are easily identified through markings.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to design a register slaughter animals. <b>Principles:</b> The students should explain the principle involved in receiving arrival animals. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Registration of the slaughter stock</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Register book,</li> <li>• Pen,</li> <li>• Computer,</li> <li>• Chair</li> <li>• Table.</li> </ul>	122

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>Observing slaughter stock on arrival</li> </ul>		
		(b) Marking slaughter animals	<p><b>Discussion:</b> Guide the students to discuss advantages of marking slaughter animals.</p> <p><b>Field visit:</b> Visit the nearby livestock holding ground or secondary livestock market and participate in marking slaughter animals</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Put identification colour paints on the animals</li> <li>Put collar on slaughter stock</li> <li>Maintain records of slaughter animals</li> </ul>	Slaughter animals records properly maintained	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to put colour paints on animals. <b>Principles:</b> The students should explain the principle involved in maintaining collar marking. <b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>Temporary marking of animals</li> <li>Permanent marking of slaughter animals</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>Animals,</li> <li>Paint mark,</li> <li>Rope,</li> <li>Crush,</li> <li>Holding ground or lairage</li> <li>Ledger book and pen</li> </ul>	
		(c) Conducting emergence slaughter	<p><b>Discussion:</b> Guide the students to discuss conditions which may necessitate</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>Identify and isolate an injured animal</li> </ul>	Emergence slaughter conducted in a hygienic manner	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b></p>	<p>This element can be achieved at a work place or training institution.</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>emergency slaughter of an animal</p> <p><b>Site visit:</b></p> <p>Visit the nearby livestock holding ground or secondary livestock market and participate in marking slaughter animals</p>	<ul style="list-style-type: none"> <li>• Report to relevant authority</li> <li>• Identify and organize emergency slaughter requirements</li> <li>• Stun and bleed the animal</li> <li>• Dress the animal;</li> <li>• Present for meat inspection.</li> <li>• Separate carcass, edible and inedible slaughter by products.</li> <li>• Portion the carcass.</li> <li>• Clean and sanitize vesicles and the venue</li> </ul>		<p><b>Method used:</b> The students should explain how to handle an emergency</p> <ul style="list-style-type: none"> <li>• slaughter</li> </ul> <p><b>Principles:</b> The students should explain the principle involved in hygienic dressing animals in a horizontal system</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Stunning in emergence slaughter</li> <li>• Advantages of emergency slaughter</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Precautions in use of free-bullets firing when necessary</li> </ul>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Appropriate safety gear,</li> <li>• Captive pistol bolt or heavy blowing object</li> <li>• Knives,</li> <li>• Sharpeners,</li> <li>• Meat trays</li> <li>• Soap</li> <li>• Water</li> <li>• Bucket</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(d) Caring (Feeding and watering) of slaughter animals in a holding ground and lairage	<b>Brainstorm:</b> Guide the students to define PSE, DFD, pH, lairage and holding ground  <b>Activity:</b> Visit the nearby lairage and participate in isolation of suspected sick animals	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Register and maintain animal records</li> <li>• Sort and pen animals according to their categories</li> <li>• Count animals (received &amp; outgoing)</li> <li>• Provide feeds and water</li> <li>• Isolate and report suspected sick animals</li> <li>• Clean holding ground and lairage</li> <li>• Disinfect lairage and holding ground</li> </ul>	Caring of slaughter animals in a lairage performed in the recommended standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to: <ul style="list-style-type: none"> <li>• Clean lairage</li> <li>• Disinfect lairage</li> </ul> <b>Principles:</b> The students should explain the principle involved in maintaining the quality of animals in a lairage <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Causative of DFD</li> <li>• Causatives of PSE</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Animal disease's Act	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Thermometer</li> <li>• Spade</li> <li>• Water troughs</li> <li>• Feeds</li> <li>• Water</li> <li>• Overall</li> <li>• Gum boot</li> <li>• Cap</li> </ul>	
		(e) Preparing slaughter	<b>Brainstorm:</b> Guide the students to	<b>The students should be able to:</b>	<b>Ante-</b> mortem inspection performed as per	<b>Knowledge evidence:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		animals for treatment or ante mortem inspection	<p>explain reasons for resting slaughter animals in a lairage</p> <p><b>Site visit</b></p> <p>Visit the nearby lairage and observe procedure involved in performing ante-mortem inspection</p>	<ul style="list-style-type: none"> <li>• Sort and pen suspected sick animals in a separate holding pen</li> <li>• Lead slaughter animal to the crush</li> <li>• Restrain the slaughter animal</li> <li>• Let the inspector to perform ante-mortem inspection</li> <li>• Release the animal after completion of the inspection</li> </ul>	the recommender standards	<p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to prepare slaughter animals for ante-mortem inspection</p> <p><b>Principles:</b> The students should explain the principle involved in identifying disease clinical signs of animals</p> <p><b>Theories:</b> The students should explain consequences of mishandling of slaughtered animals in a lairage.</p> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Handling of animals diagnosed with notifiable disease in a lairage</p>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Thermometer</li> <li>• Overcoat</li> <li>• Gumboots</li> <li>• Cap</li> <li>• Washing basins</li> <li>• Water</li> <li>• Gloves</li> <li>• Stethoscope</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
2.0 Slaughtering of food animals and poultry	2.1 Rendering slaughter stock unconscious and bleeding	(a) Performing mechanical stunning	<p><b>Brainstorm:</b></p> <p>Guide the students to define mechanical stunning, and rendering unconscious</p> <p><b>Site visit:</b></p> <p>Organize the students in manageable groups and visit a nearby slaughterhouse and identify different methods of stunning.</p> <p><b>Practical work:</b></p> <p>Guide the students to Perform mechanical stunning</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Put slaughter stock in stunning box/room</li> <li>•Stun slaughter stock using captive pistol bolt.</li> <li>•Stun slaughter stock using pneumatic captive I bolt.</li> <li>•Stun slaughter stock using heavy blowing objects.</li> <li>•Observe health safety precautions</li> <li>•Keep records</li> </ul>	Slaughter stocks stunned by mechanical stunning according to the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to perform mechanical stunning.</p> <p><b>Principles:</b> The students should explain principles related to mechanical stunning.</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Steps involved in leading slaughter stock to stunning box/room.</li> <li>•Importance of stunning slaughter stock</li> <li>•Advantages and disadvantages of mechanical stunning.</li> <li>•Different methods of mechanical stunning</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Coaxer</li> <li>•Rope</li> <li>•Stunning box</li> <li>•Prod</li> <li>•carbon monoxide</li> <li>•Record book</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Animal</li> <li>•Cap or helmet</li> </ul>	96

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Safety precautions during performing mechanical stunning		
		(b) Performing electrical stunning	<b>Brainstorm:</b>  Guide the students to define electrical stunning  <b>Site visit:</b>  Visit the nearby lairage and observe procedure involved in performing electrical stunning  <b>Practical work:</b>  Guide the students on how to Performing electrical stunning	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Put slaughter stock in stunning box/room</li> <li>•Stun slaughter stock using electrical stunning</li> <li>•Observe health safety precautions</li> <li>•Keep records</li> </ul>	<b>Slaughter</b> Electrical stunning slaughter animals performed according to the recommended standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform electrical stunning <b>Principles:</b> The students should explain principles of performing electrical stunning. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Procedures of performing electrical stunning</li> <li>• Disadvantages of electrical stunning</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Coaxer</li> <li>•Rope</li> <li>•Stunning box</li> <li>•Prod</li> <li>•carbon monoxide</li> <li>•Record book</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Animal</li> <li>•Cap or helmet</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Rituals involved in bleeding slaughter stock</li> <li>•Anatomy of the body of animals</li> <li>•Animal behaviour</li> </ul>		
		(c) Applying carbon monoxide to render slaughter animal unconscious	<b>Brainstorm:</b>  Guide the students to define Carbon Dioxide (CO <sub>2</sub> ), Carbon Monoxide (CO),  <b>Site visit:</b>  Visit the nearby pig slaughter house and observe procedure involved in gaseous stunning method  <b>Practical work:</b>  Guide the students to applying carbon monoxide to render	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Put slaughter stock in stunning box/room</li> <li>•Stun slaughter stock using carbon monoxide</li> <li>•Observe health safety precautions</li> <li>•Keep records</li> </ul>	Slaughter stocks stunned by Applying carbon monoxide according to the standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to stun animal by using carbon monoxide  <b>Principles:</b> The students should explain principles of applying carbon monoxide to render slaughter animal unconscious  <b>Theories:</b> The students should explain:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Coaxer</li> <li>•Rope</li> <li>•Stunning box</li> <li>•Prod</li> <li>•Carbon monoxide</li> <li>•Record book</li> <li>•Gum boots</li> <li>•Overall</li> <li>•Animal</li> <li>•Cap or helmet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			slaughter animal unconscious			<ul style="list-style-type: none"> <li>• Benefits of gas stunning method</li> <li>• Types of gas used for stunning</li> <li>• Reaction of gas in animal's body</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Rituals involved in bleeding slaughter stock</li> <li>• Anatomy of the body of animals</li> <li>• Animal behaviour</li> </ul>		
		(d) Performing Halal bleeding	<p><b>Brainstorm:</b></p> <p>Guide the students to define Halal bleeding</p> <p><b>Site visit</b></p> <p>Organize the students in manageable groups and visit a nearby slaughter house to</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Put slaughter stock in stunning box/room</li> <li>• Identify the stunning site</li> <li>• Stun slaughter stock</li> </ul>	Slaughter animals bled according to Halal bleeding rituals	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how Halal slaughter is Performed. <b>Principles:</b> The students should explain principles</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Coaxer</li> <li>• Rope</li> <li>• Sharpener</li> <li>• Prod</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			observe Halal bleeding process.  <b>Practical work:</b> Guide the students to prepare an animal ready for performing Halal bleeding	<ul style="list-style-type: none"> <li>• Hoist the stunned animal at a right position</li> <li>• Perform Halal bleeding</li> <li>• Observe health safety precautions</li> <li>• Keep records</li> </ul>		related Halal bleeding <b>• Theories:</b> The students should explain: <b>• Why Halal bleeding of slaughter stock</b> <b>• Different method used to bleed stunned animals</b> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <b>• Rituals involved in bleeding slaughter stock</b> <b>• Anatomy of the body of animals</b> <b>• Animal behaviour</b>	<ul style="list-style-type: none"> <li>• Stunning box</li> <li>• Record book</li> <li>• Gum boots</li> <li>• Knife</li> <li>• Water</li> <li>• Animal</li> <li>• Overall</li> <li>• Cap or helmet</li> </ul>	
		(e) Performing Jewish bleeding	<b>Brainstorm:</b> Guide the students to define Jewish bleeding, chalaf and Sochet  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Put slaughter stock in stunning box/room</li> </ul>	Slaughter stock bled by Jewish bleeding according to the standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to performing Jewish bleeding	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Coaxer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students to prepare animal for performing Jewish bleeding (In case the Sochet is available)	<ul style="list-style-type: none"> <li>• Let the Sochet to bleed the animal</li> <li>• Hang the bled animal</li> <li>• Dress the bled animal</li> <li>• Observe health safety precautions</li> </ul>		<p><b>Principles:</b> The students should explain principles of performing Jewish bleeding</p> <p><b>Theories:</b> The students should explain how Jewish ritual slaughter is Performed.</p> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Rituals involved in bleeding slaughter stock</li> <li>• Anatomy of the body of animals</li> <li>• Animal behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Rope</li> <li>• Sharpener</li> <li>• Prodder</li> <li>• Stunning box</li> <li>• Record book</li> <li>• Gum boots</li> <li>• Knife</li> <li>• Water</li> <li>• Animal</li> <li>• Overall</li> <li>• Cap or helmet</li> </ul>	
	2.2 Dressing bled animals	(a) Performing head and leg scalping	<p><b>Brainstorm:</b></p> <p>Guide the students to define scalping</p> <p><b>Field visit:</b></p> <p>Organize the students in</p>	<ul style="list-style-type: none"> <li>• <b>The students should be able to:</b></li> <li>• Organize work tools, equipment, utensils and safety gear</li> </ul>	<b>Head</b> and leg scalped according to the required procedure	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p>	154

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			manageable groups and visit the nearby slaughterhouse and participate in scalping head and legs  <b>Practical work:</b>  Guide the students on how to perform head and leg scalping	<ul style="list-style-type: none"> <li>•Hoist the bled animal</li> <li>•Perform head and leg scalping</li> <li>•Observe health safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment</li> <li>•Store tools and equipment</li> </ul>		perform head and leg scalping <b>Principles:</b> The students should explain the principles of performing head and leg scalping <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Methods of head and leg scalping</li> <li>•Performing head scalping</li> <li>•Leg scalping</li> <li>•Importance of leg and head scalping</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Anatomy of joints</li> <li>•Safety precautions in using scalping equipment.</li> </ul>	<ul style="list-style-type: none"> <li>•Set of knives</li> <li>•Sharpener</li> <li>•Hoisting device</li> <li>•Butcher claver</li> <li>•Scalping equipment</li> <li>•Gripping hooks</li> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Scarbad</li> </ul>	
		(b) Making ripping cuts.	<b>Brainstorm:</b>  Guide the students to define ripping	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment,</li> </ul>	<b>Ripping</b> cuts to bled animal made in the	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Site visit:</b>  Organize the students in manageable group to visit a nearby slaughterhouse and participate in making ripping cuts  <b>Practical work:</b>  Guide the students on how to making ripping cuts.	utensils and safety gear •Hoist the bled animal •Perform head and leg scalping •Identify boarders for making ripping cuts •Make ripping cuts. •Perform initial flaying /skinning •Clean tools, equipment •Store tools and equipment	recommended standards	<b>Method used:</b> The students should explain how to make ripping cuts <b>Principles:</b> The students should explain the principles related to making ripping cuts.  <b>Theories:</b> The students should explain importance of •Procedure of making ripping cuts <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Topographical anatomy of animals	The following tools, equipment and safety gear are to be available:-  •Ripping knives •Sharpener •Hoisting device •Butcher claver •Scalping equipment •Gripping hooks •Record book •Cap or helmet •Gum boots •Plastic overall/gown •White coat/t-shirt/shirt •Plastic apron •Iron gloves •Scabbard	
		(c) Flaying/skinning ruminants	<b>Brainstorm:</b>  Guide the students to define Flaying/skinning,	<b>The students should be able to:</b> •Organize work tools, equipment, utensils and safety gear	Flaying/skinning ruminants correctly performed	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should	This element can be achieved at a work place or training institution.  The following tools, equipment and	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>gambrel and Achilles tendon</p> <p><b>Field visit</b></p> <p>Organize the students in manageable group to visit a nearby slaughterhouse and participate practice flaying and skinning ruminants</p> <p><b>Practical work:</b></p> <p>Guide the students on how to perform flaying/skinning ruminant</p>	<ul style="list-style-type: none"> <li>•Hoist the bled animal</li> <li>•Perform head and leg scalping</li> <li>•Make ripping cuts</li> <li>•Perform flaying/skinning</li> <li>•Observe health safety precautions</li> <li>•Clean tools, equipment</li> <li>•Store tools and equipment</li> </ul>		<p>explain how to flay /skin ruminants</p> <p><b>Principles:</b> The students should explain the principles related flaying ruminants</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Factors to consider when flaying/skinning ruminants</li> <li>•Vertical, horizontal, both vertical and horizontal methods of dressing /skinning.</li> <li>•Steps involved in flaying ruminants</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Anatomy of the skin/hide and muscles</li> <li>•Quality of hides and skins</li> </ul>	<p>safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Flaying knives</li> <li>•Sharpener</li> <li>•Hoisting device</li> <li>•Butcher claver</li> <li>•Scalping equipment</li> <li>•Gripping hooks</li> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Scabbard</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(d) Plucking poultry feathers	<p><b>Brainstorm:</b></p> <p>Guide the students to define plucking, scalding, pin feathers</p> <p><b>Site visit:</b></p> <p>Organize the students in manageable groups to visit poultry unit, farm or abattoir and practice plucking chickens by using a plucking machine</p> <p><b>Practical work:</b></p> <p>Guide the students on how to perform manual and machine of plucking poultry feathers</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Select, stun and bleed chickens</li> <li>•Prepare scalding water</li> <li>•Immerse bled chickens in scalding water</li> <li>•Perform plucking either by hands or by plucking machine</li> <li>•Observe health safety precautions</li> <li>•Clean tools, equipment</li> <li>•Store tools and equipment</li> </ul>	Poultry feathers plucked correctly	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to pluck poultry feathers</p> <p><b>Principles:</b> The students should explain principles related to plucking feathers</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Factors to consider when plucking poultry feathers</li> <li>•Advantages and disadvantages of manual plucking</li> <li>•Advantages and disadvantages of machine plucking</li> <li>•Steps involved in plucking poultry feathers</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Set of knives</li> <li>•Sharpener</li> <li>•Stove</li> <li>•Water</li> <li>•Scalding vat</li> <li>•Thermometer</li> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Bled poultry</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Integumentary system anatomy of poultry</li> <li>• Temperatures required for scalding of different species</li> </ul>		
		(e) Perform dehairing of pigs	<b>Brainstorm:</b> Guide the students to define Stubble, dehairing, Singeing  <b>Site visit:</b> Organize the students in manageable groups to visit a pig slaughterhouse or slab and practice both machine and manual dehairing of pigs  <b>Demonstration:</b> Demonstrate to students on how to	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Stun and bleed pig</li> <li>• Prepare scalding water</li> <li>• Immerse bled pigs in scalding water</li> <li>• Perform dehairing</li> <li>• Perform singeing</li> <li>• Observe health safety precautions</li> <li>• Clean tools, equipment</li> </ul>	Dehairing of pi performed as per the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform dehairing of pigs  <b>Principles:</b> The students should explain the principles related to the dehairing process  <b>Theories:</b> The students should explain:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Set of knives</li> <li>• Sharpener</li> <li>• Stove</li> <li>• Water</li> <li>• Scalding vat</li> <li>• Thermometer</li> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			perform manual and machine dehairing  <b>Practical work:</b>  Guide the students on how to perform manual and machine dehairing of pigs	<ul style="list-style-type: none"> <li>• Store tools and equipment</li> <li>• Keep record</li> </ul>		<ul style="list-style-type: none"> <li>• Procedure of dehairing pigs</li> <li>• Methods of dehairing pigs</li> <li>• Types of dehairing machines</li> <li>• Benefits of machine dehairing</li> </ul> <b>Circumstantial knowledge Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Anatomy of the gastrointestinal tract</li> <li>• Temperatures required for scalding of different species</li> </ul>	<ul style="list-style-type: none"> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Bled pig</li> <li>• Singeing machine</li> <li>• Gas cylinder</li> </ul>	
		(f) Eviscerating dressed animals	<b>Brainstorm:</b>  Guide the students to define Evisceration  <b>Abattoir visit:</b>  Organize the students in manageable groups to prepare	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify a dressed animals</li> <li>• Eviscerating dressed animals</li> </ul>	Eviscerating dressed animals is well performed	<b>Knowledge evidence: Detailed knowledge of: Method used:</b> The students should explain how to eviscerate dressed animals	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Set of knives</li> <li>• Sharpener</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>equipment used in eviscerating dressed animals</p> <p><b>Demonstration:</b></p> <p>Demonstrate to students on how to perform evisceration</p> <p><b>Practical work:</b></p> <p>Guide the students to perform eviscerating dressed animals</p>	<ul style="list-style-type: none"> <li>• Observe health safety precautions</li> <li>• Clean tools, equipment</li> <li>• Store tools and equipment</li> </ul>		<p><b>Principles:</b> The students should explain the principles of carcasses evisceration</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Steps involved in eviscerating animals and poultry.</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b> Anatomy of the digestive system</p>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Dressed animal</li> </ul>	
		(g) Marking carcasses and organs	<p><b>Brainstorm:</b></p> <p>Guide the students to define marking, carcasses, organs, identification code, disease surveillance</p> <p><b>Site visit:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize specific marks and safety gear</li> <li>• Identify a dressed and eviscerated animals</li> <li>• Put marks on carcasses and organs.</li> </ul>	Marking carcasses and organs in meat processing facility performed as per the recommended procedure	<p><b>Knowledge evidence: Detailed knowledge of: Method used:</b> The students should explain how to mark carcasses and organs</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Official stamp</li> <li>• Food colouring/ink</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Organize the students in manageable groups to prepare equipment used in marking carcasses and organs.</p> <p><b>Practical work:</b></p> <p>Guide the students on how to mark carcasses and organs.</p>	<ul style="list-style-type: none"> <li>• Observe health safety precaution</li> </ul>		<p><b>Principles:</b> The students should explain the principles related to marking carcasses and organs.</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Importance of marking carcasses and organs.</li> <li>• Methods used in marking carcasses</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Knowledge on food grade paints.</p>	<ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Dressed and eviscerated animal</li> </ul>	
		(h) Identifyin g abnormal lesions on carcasses and edible slaughter	<p><b>Brainstorm:</b></p> <p>Guide the students to define lesion, meat inspection, and condemnation</p> <p><b>Group discussion:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Prepare the carcass, head, offal and pluck</li> </ul>	Meat inspection performed as per the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to prepare carcasses and edible slaughter</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		by-products	<p>Organize the students in manageable groups to prepare carcasses and edible slaughter by-products for inspection</p> <p><b>Practical work:</b></p> <p>Guide the students to prepare and present carcasses and their organs for meat inspection</p>	<ul style="list-style-type: none"> <li>• Present carcasses and edible slaughter by-products for inspection</li> <li>• Handle meat inspection judgements</li> <li>• Observe health safety precaution</li> </ul>		<p>by-products for meat inspection</p> <p><b>Principles:</b> The students should explain the principles related to identification of abnormal lesions on carcasses and edible slaughter by-products</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Key abnormal lesions on carcasses and organs</li> <li>• Procedure of presenting carcasses and organs for meat inspection.</li> <li>• Benefits of meat inspection</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b></p>	<ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Dressed and eviscerated animal</li> <li>• Head</li> <li>• Offal</li> <li>• Set of knives</li> <li>• Sharpener</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						Knowledge on occupational hazards		
	2.3. Handling of meat passed for human consumption	(a) Grading carcasses	<b>Brainstorm:</b> Guide the students to define grading, marbling, carcass conformation, Tenderness  <b>Abattoir visit:</b> Organize the students in manageable groups to prepare carcasses for grading  <b>Practical work:</b> Guide the students on how to perform grading of carcasses	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Prepare carcasses for grading</li> <li>•Evaluate carcass</li> <li>•Grade ruminant carcasses</li> <li>•Grade pig carcasses</li> <li>•Grade poultry carcasses</li> <li>•Keep records</li> <li>•Observe health safety precaution</li> </ul>	Carcasses are correctly graded	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to grade carcasses of different animal species. <b>Principles:</b> The students should explain the principles related to grading of different animal species. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Importance of grading of carcasses</li> <li>•Care required during handling of cold meat</li> <li>•Criteria used in grading carcasses</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Carcasses</li> <li>•Set of knives</li> <li>•Sharpener</li> </ul>	38

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						of different animal species • Relationship between live animals grade and carcass grade • Disadvantage of poor meat handling  <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> • Skeletal and muscle anatomy • Meat Industry Act; and Tanzania Food, Drugs and Cosmetics Act and its Regulations		
		(b) Dispatching warm and chilled carcasses	<b>Brainstorm:</b> Guide the students to define dispatching, warm meat, chilled meat  <b>Abattoir visit:</b> Organize the students in	<b>The students should be able to:</b> • Organize work tools, equipment, utensils and safety gear • Prepare the carcasses to be dispatched • Prepare meat van	warm and chilled carcasses dispatched according to the recommended procedure	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to dispatch warm and chilled carcasses	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- • Record book • Cap or helmet	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			manageable groups to visit the nearby slaughterhouse and participate in dispatching carcasses  <b>Practical work:</b>  Guide the students on how to dispatch warm and chilled carcasses	<ul style="list-style-type: none"> <li>•Dispatch warm carcasses</li> <li>•Dispatch chilled/frozen carcasses</li> <li>•Monitor meat van temperature</li> <li>•Observe health safety precaution</li> <li>•Clean tools, equipment and workplace</li> </ul>		<p><b>Principles:</b> The students should explain the principles related to meat dispatching.</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Important points to consider in dispatching warm and cold meat</li> <li>•Maintaining cold chain transportation of meat</li> <li>•Disadvantage of poor meat handling</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Meat hygiene</li> <li>•Industry Act; and Tanzania Food, Drugs and Cosmetics Act and its Regulations</li> </ul>	<ul style="list-style-type: none"> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Warm and chilled carcasses</li> <li>•Meat vans</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
	2.4 Handling conditional passed meat for human consumption	(a) Freezing conditional ly meat passed for human consumption	<p><b>Brainstorm:</b></p> <p>Guide the students to define Conditional meat, Freezing of meat, Defrost</p> <p><b>Abattoir visit:</b></p> <p>Organize the students in manageable groups to check power stability, presence of chiller or freezer</p> <p><b>Practical work:</b></p> <p>Guide the students to perform freezing conditionally meat passed for human consumption</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Prepare conditionally meat passed for human consumption</li> <li>•Freeze conditional meat passed for human consumption</li> <li>•Present meat frozen meat for human consumption for re- inspection.</li> <li>•Dispatch cold meat</li> </ul>	Conditionally meat passed for human consumption frozen as per the recommended temperatures	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to freeze conditionally meat passed for human consumption.</p> <p><b>Principles:</b> The students should explain the principles related to freezing of conditional meat passed for human consumption</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•Freezing temperature for conditional meat passed for human consumption.</li> <li>•Steps involved in freezing conditional passed meat</li> <li>•Importance of freezing</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•Thermometer</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•chilled carcasses</li> </ul>	58

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						conditional passed meat <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Knowledge on parasitology		
		(b) Boiling conditional meat passed for human consumption	<b>Brainstorm:</b> Guide the students to define boiling  <b>Abattoir visit:</b> Organize the students in manageable groups to visit a nearby abattoir and observe boiling of conditional meat passed for human consumption.  <b>Practical work:</b> Guide the students to perform boiling conditional meat	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Prepare carcass for boiling</li> <li>•Boil conditional meat passed for human consumption</li> <li>•Present boiled meat for re-inspection</li> <li>•Dispatch boiled meat</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	conditionally meat passed for human consumption boiled as per the recommended procedure	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to boil conditional meat passed for human consumption. <b>Principles:</b> The students should explain the principles related to boiling of conditional meat passed for human consumption  <b>Theories:</b> The student should explain: <ul style="list-style-type: none"> <li>•Recommended boiling</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•Thermometer</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Carcasses</li> <li>•Cooking pot</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			passed for human consumption.			temperatures for conditional meat passed for human consumption <ul style="list-style-type: none"> <li>•Steps involved in boiling conditional passed meat</li> <li>•Importance of boiling of conditional passed meat</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Knowledge on parasitology		
		(c) Retaining conditional meat passed for human consumption	<b>Brainstorm:</b> Guide the students to define retaining <b>Abattoir visit:</b> Organize the students in manageable groups to visit a nearby abattoir and observe retained conditional meat passed for	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Prepare conditional meat passed for human consumption</li> <li>•Retain conditional meat passed for human consumption</li> </ul>	Conditionally meat passed for human consumption retained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to retain conditional meat passed for human consumption  <b>Principles:</b> The students should explain the principles related	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•Retention room</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			human consumption.  <b>Practical work:</b>  Guide the students to perform retaining conditional meat passed for human consumption	<ul style="list-style-type: none"> <li>• Present retained conditional meat for re-inspection</li> <li>• Dispatch retained meat</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		retention of conditional meat passed for human consumption <b>Theories:</b> The student should explain: <ul style="list-style-type: none"> <li>• Meat conditions or lesions which may lead required retention</li> <li>• Steps involved in retaining conditional meat passed for human consumption</li> <li>• Importance of retaining conditional meat passed meat for human consumption</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Meat hygiene <ul style="list-style-type: none"> <li>• Basic animal parasitology</li> <li>• Basic Pathology</li> </ul>	<ul style="list-style-type: none"> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Carcasses</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
	2.5 Handling condemned materials	(a) Rendering condemned materials to animal feed	<p><b>Brainstorm:</b></p> <p>Guide the students to define, identify, mention, and describe the meaning of Rendering condemned materials</p> <p><b>Abattoir visit:</b></p> <p>Organize the students in manageable groups to collect inedible by-products for rendering, and other materials</p> <p><b>Practical work:</b></p> <p>Guide the students on how to perform rendering of condemned materials to animal feed</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Segregate condemned materials from meat passed for human consumption.</li> <li>•Process condemnns into petty food</li> <li>•Observe health and safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Condemned materials properly rendered into animal feed according to directions	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to render condemned materials into animal feeds</p> <p><b>Principles:</b> The students should explain the principles involved in rendering condemnns materials in to petty food</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Advantages of rendering condemnns in to petty food</li> <li>•Factors to consider in rendering condemned materials into animal feed</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Carcasses</li> <li>•Weighing scale,</li> <li>•Meat trolleys,</li> <li>•Knives,</li> <li>•Identification tags,</li> <li>•Thermometer,</li> <li>•Milling machine,</li> <li>•Bags/sacks</li> </ul>	38

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Safety precautions in handling condemned materials</li> </ul>		
		(b) Disposing condemned materials	<p><b>Brainstorm:</b></p> <p>Guide the students to define condemned materials</p> <p><b>Abattoir visit:</b></p> <p>Organize the students in manageable groups to visit a nearby abattoir and observe methods of disposing condemned materials</p> <p><b>Practical work:</b></p> <p>Guide the students on how to dispose condemned materials</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Remove condemned materials from slaughter hall</li> <li>• Incinerate condemned materials</li> <li>• Bury condemned materials</li> <li>• Dispose condemned materials into decomposition pit</li> <li>• Observe health and safety precautions</li> <li>• Keep records</li> </ul>	Condemned materials disposed as per the recommended procedure.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to dispose of condemned materials.</p> <p><b>Principles:</b> The student should explain the principles involved in incineration and burning of condemned materials</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Type of condemned materials need to be incinerated</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• special meat trolleys for condemnns,</li> <li>• Incinerator,</li> <li>• hoe,</li> <li>• Spade,</li> <li>• Firewood and</li> <li>• match box,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Steps involved in burring condemned materials</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Safety precautions in handling condemned materials</p>	<ul style="list-style-type: none"> <li>• Condemnation pit,</li> <li>• Concentrated sulphuric acids</li> <li>• Hydrochloric acids</li> </ul>	
3.0 Performing preventive maintenance of meat processing facilities, tools, equipment and machines	3.1 Performing preventive maintenance of meat processing facility	(a) Performing preventive maintenance of building and sanitary facilities	<p><b>Brainstorm:</b> Guide the students to define preventive, routine, corrective, and emergence maintenance</p> <p><b>Group discussion:</b></p> <p>Guide the students to walk around school buildings and sanitary articles to inspect, record the identified defects, and suggest measures to be taken</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify damages and faults</li> <li>• Evaluate extent of damage or fault</li> <li>• Identify requirements for identified fault or damage</li> <li>• Plan for conducting</li> <li>• Conduct preventive maintenance for the identified</li> </ul>	Buildings and sanitary articles maintained according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to :</p> <ul style="list-style-type: none"> <li>• Inspect building damages</li> <li>• Check sanitary articles damages and faults</li> <li>• Procedure of conducting preventive maintenance</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Brooms,</li> <li>• Brushes,</li> <li>• Rubber squeezers,</li> <li>• water,</li> <li>• Hose pipes,</li> <li>• Buckets,</li> <li>• Mope</li> </ul>	110

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>to alleviate the situation</p> <p><b>Practical work:</b></p> <p>Visit the nearby slaughterhouse and guide the students on how to clean the slaughter house.</p>	faults and damages		<p><b>Principles:</b> The students should explain the principle involved in conducting routine, preventive, corrective and emergence maintenance</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Benefits of maintaining buildings and sanitary articles</li> <li>• Activities for making preventive maintenance of building and sanitary articles</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Costs consciousness in conducting preventive maintenance</p>	<ul style="list-style-type: none"> <li>• Detergents</li> <li>• Disinfectants</li> <li>• Spare parts</li> <li>• Building materials</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Heavy duty gloves</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
		(b) Performing preventive maintenance of drainage system	<p><b>Brainstorm:</b> Guide the students to explain the meaning of drainage system</p> <p><b>Group discussion:</b></p> <p>Guide the students to walk around school buildings and sanitary articles to inspect, record the identified defects, and suggest measures to be taken to alleviate the situation</p> <p><b>Practical work:</b></p> <p>Visit the nearby slaughterhouse and guide the students on how to clean and unblock the drainage system.</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify damages</li> <li>• Identify blockages</li> <li>• Evaluate extent of damages</li> <li>• Identify requirements for identified damages</li> <li>• Unblock drainage systems</li> <li>• Conduct preventive maintenance</li> </ul>	Drainage systems well maintained and operating smoothly	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to Performing preventive maintenance of drainage system</p> <p><b>Principles:</b> The students should explain the principle involved in unblocking the drainage system by using a plunger, toilet snake, auger and hydro jets</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Benefits of maintaining drainage systems</li> <li>• unblock drainage systems by using hot and chemicals</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• cleaning and debris removal tools</li> <li>• Brooms,</li> <li>• Brushes,</li> <li>• Rubber</li> <li>• Squeezers,</li> <li>• Water,</li> <li>• Hose pipes,</li> <li>• Buckets,</li> <li>• Mope</li> <li>• Detergents</li> <li>• Disinfectants</li> <li>• Spare parts</li> <li>• Building materials</li> <li>• Gumboots</li> <li>• Overall</li> <li>• Cap or helmet</li> <li>• Heavy duty gloves</li> <li>• Drain rods</li> <li>• Drain snake</li> <li>• Auger,</li> <li>• plunger,</li> <li>• Hydro jets</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
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						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Avoiding backflow of drainage	<ul style="list-style-type: none"> <li>• Hot water,</li> <li>• Soda crystals</li> </ul>	
		(c) Performing preventive maintenance of the environment	<p><b>. Brainstorm:</b> Guide the students to define air, land and water pollution.</p> <p><b>Group discussion:</b> Guide the students to walk around school open spaces and identify environmental faults and state measures to be taken to alleviate the situation</p> <p><b>Practical work:</b> Guide the students on how to clean walkway, cut grass and pruning trees</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify environmental pollution</li> <li>• Provide dustbins to all strategic areas</li> <li>• Dispose wastes</li> <li>• Clean walkways</li> <li>• Prune trees</li> <li>• Cut grasses</li> <li>• Care flowers</li> </ul>	Attractive meat processing environment and its surroundings	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform environmental preventive maintenance</p> <p><b>Principles:</b> The students should explain the principle involved in controlling air, land and water pollution.</p> <p><b>Theories:</b> The students should explain:  <ul style="list-style-type: none"> <li>• Benefits of maintaining environment</li> </ul> </p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Slashers</li> <li>• Panga,</li> <li>• Rakes,</li> <li>• Hand hoes,</li> <li>• Axes,</li> <li>• Spades,</li> <li>• Brooms</li> <li>• Tractors</li> <li>• Wheelbarrow</li> <li>• Horse pipes</li> <li>• Compressor</li> <li>• Dustbin</li> <li>• Disposal pits</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Procedure of maintaining environment</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Recycling and utilization of wastes.</p>		
		(d) Performing preventive maintenance of the plumbing system	<p><b>Brainstorm:</b> Guide the students to discuss the importance of the plumbing system in a meat processing facility.</p> <p><b>Site visit:</b></p> <p>Visit the nearby slaughterhouse and guide the students to walk around the processing building and identify plumbing system faults and state</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify plumbing leakages,</li> <li>• Identify running toilets,</li> <li>• Check dripping faucets,</li> <li>• Check corrosion of pipes</li> <li>• Perform repair and maintenance of the identified faults</li> </ul>	Plumbing system well maintained and smoothly operating.	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain the plumbing system.</p> <p><b>Principles:</b> The students should explain the principle involved in maintaining pumps and water heating systems.</p> <p><b>Theories:</b> The students should explain:</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Stock and die</li> <li>• Pipe wrench</li> <li>• Screw driver</li> <li>• Hack saw</li> <li>• Overall</li> <li>• Helmet</li> <li>• Gum boot</li> <li>• Thread seal tape</li> <li>• Set of unblocking tools</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
			measures to be taken.			<ul style="list-style-type: none"> <li>• Benefits of maintaining plumbing system</li> <li>• Procedure of maintaining plumbing system.</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Precautions when dealing with a water heating system</p>		
		(e) Perform preventive maintenance of a lairage	<p><b>Discussion:</b> Guide the students to discuss major components of a lairage</p> <p><b>Site visit</b> Visit the nearby slaughterhouse and guide the students to identify basic components of the lairage</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Check damages and faults</li> <li>• Check entrance gates</li> <li>• Inspect holding pen gates</li> <li>• Check the water trough</li> <li>• Clean the lairage</li> <li>• Disinfect the lairage</li> </ul>	Lairage maintained according to the required standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to clean and disinfect a lairage</p> <p><b>Principles:</b> The students should explain the principle involved in disinfecting the lairage</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Brooms,</li> <li>• Brushes</li> <li>• Rubber squeezers,</li> <li>• Pipe horses,</li> <li>• Bucket</li> <li>• Detergent</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b> Visit the nearby slaughterhouse and guide the students on how to repair and clean the lairage			<b>Theories:</b> The students should explain the importance of maintaining lairage  <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Compliance with animal welfare and hygiene regulations	<ul style="list-style-type: none"> <li>• Disinfectant</li> <li>• Potable water</li> </ul>	
		(f) Performing preventive maintenance of decomposition pit and incinerator	<b>Discussion:</b> Guide the students to discuss incinerator and decomposition pits  <b>Site visit:</b> Visit the nearby slaughterhouse and guide the students to identify basic components of the incinerator and observe the incineration process	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Inspect the decomposition pit</li> <li>• Put lime into a decomposition pit</li> <li>• Prevent storm water to the decomposition pit</li> <li>• Check intactness of decomposition pit</li> <li>• Inspect cracks on the incinerator</li> </ul>	Incinerator and decomposition properly maintained	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain the incinerator and decomposition pit  <b>Principles:</b> The students should explain the principle involved in performing preventive	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Brushes</li> <li>• Buckets,</li> <li>• Hand hoe,</li> <li>• Slasher</li> <li>• Detergents,</li> <li>• Disinfectants</li> <li>• Wheelbarrow,</li> <li>• Grease,</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Clean incinerator</li> </ul>		maintenance of an incinerator <b>Theories:</b> The students should explain the importance of the incinerator and decomposition pit  <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Occupational health hazards associated with preventive maintenance of incinerators	<ul style="list-style-type: none"> <li>• Cement,</li> <li>• Sand,</li> <li>• Spade</li> <li>• Potable water</li> </ul>	
	3.2 Performing preventive maintenance of meat processing tools	(a) Performing preventive maintenance of shackling chains, hooks, and gambrels	<b>Discussion:</b> Guide the students to discuss the importance of performing preventive maintenance of slaughter processing tools.  <b>Site visit:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify meat processing tools</li> <li>• Clean meat processing tools</li> <li>• Sanitize meat processing tools</li> <li>• Lubricate meat processing tools</li> <li>• Repair meat processing tools</li> </ul>	shackling chains, hooks, and gambrels maintained as per the recommender standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to clean shackling chains, hooks, and gambrels.	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Brushes,</li> </ul>	37

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				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Visit the nearby slaughterhouse and guide the students to identify meat processing tools</p> <p><b>Practical work:</b> Visit the nearby slaughterhouse and guide the students on how to clean meat processing tools.</p>	<ul style="list-style-type: none"> <li>•Store meat processing tools</li> </ul>		<p><b>Principles:</b> The students should explain the principle involved in sanitizing and lubricating shackling chains, hooks, and gambrels.</p> <p><b>Theories:</b> The students should explain the importance of maintaining shackling chains, hooks, and gambrels.</p> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Occupational health hazards associated with preventive maintenance of meat processing tools</p>	<ul style="list-style-type: none"> <li>•Food grade grease/liquid lubricant,</li> <li>•Buckets,</li> <li>•Meat trolley,</li> <li>•Detergents</li> <li>•Disinfectant</li> <li>•Potable water</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(b) Performing preventive maintenance of meat hand saws	<p><b>Discussion:</b> Guide the students to discuss importance of performing preventive maintenance of meat hand saw</p> <p><b>Practical work:</b> Visit the nearby slaughterhouse and guide the students on how to sharpen band saws</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Clean and sanitize the saw</li> <li>• Remove meat residue and bone fragments</li> <li>• Lubricate the blade</li> <li>• Dry the hand meat saw.</li> <li>• Sharpen hand saw blades.</li> <li>• Remove blade rust.</li> <li>• Keep hand band saws always dry.</li> </ul>	Meat Hand saws maintained in the required standards.	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain meat hand saws.</p> <p><b>Principles:</b> The students should explain the principle involved in sharpening blades for meat hand saws</p> <p><b>Theories:</b> The students should explain the importance of lubricating meat hand saws.</p> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Occupational health hazards associated with preventive maintenance of incinerators.</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Blade sharpener</li> <li>• File,</li> <li>• Brush</li> <li>• Detergent</li> <li>• Water,</li> <li>• Food grade oil,</li> <li>• Gun oil/ paste wax, meat</li> <li>• Hand saw.</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
	3.3 Performing preventive maintenance of skinning/flaying equipment and machines	(a) Performing preventive maintenance of stunner equipment	<p><b>Discussion:</b> Guide the students to explain about stunners; electrical device, pneumatic captive bolt and captive pistol bolt stunners.</p> <p><b>Practical work:</b> Visit the nearby slaughterhouse and guide the students on how to perform preventive maintenance of electrical device, pneumatic captive bolt and captive pistol bolt stunners</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Cleaning stunners</li> <li>•Inspect stunners</li> <li>•Lubricate stunners</li> <li>•Replace worn out parts.</li> <li>•Sanitize stunners</li> </ul>	Stunners well maintained and effectively render animals unconscious	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to:</p> <ul style="list-style-type: none"> <li>•Perform maintenance of electrical stunning device</li> <li>•Perform maintenance of captive pistol bolt</li> <li>•Perform maintenance of pneumatic captive bolt</li> </ul> <p><b>Principles:</b> The students should explain the principle involved in testing stunners for safety purposes.</p> <p><b>Theories:</b> The students should explain :</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Spanners</li> <li>•Iron brushes</li> <li>•Disinfectants</li> <li>•Clean and dry cloth</li> <li>•Spare parts</li> </ul>	110

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•The importance of maintaining stunners.</li> <li>•Hazards associated with using non-maintained electrical stunner.</li> </ul>		
		(b) Performing preventive maintenance of de-hiders	<p><b>Brainstorm:</b> Guide the students to define de-hiders</p> <p><b>Site visit:</b></p> <p>Visit the nearby slaughter house to observe preventive maintenance of de-hiders</p> <p><b>Practical work</b></p> <p>Guide the students on how conduct preventive maintenance of hock cutters / scalping equipment</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Check power, straightness and roughness</li> <li>•Clean the blade sharpener</li> <li>•Replace saw blade sharpener</li> <li>•Store blade sharpener</li> </ul>	de-hiders maintained according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to perform maintenance of de-hiders.</p> <p><b>Principles:</b> The students should explain the principles performing preventive maintenance of de-hiders.</p> <p><b>Theories:</b> The students should explain the importance of</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Lubricants</li> <li>•Spanners</li> <li>•Spare parts</li> <li>•Coolant</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						performing preventive de-hiders		
		(c) Performing preventive maintenance of hock cutters / scalping equipment	<b>Brainstorm:</b> Guide the students to define scalping equipment  <b>Site visit:</b> Visit the nearby slaughter house to observe preventive maintenance of hock cutters / scalping equipment  <b>Practical work</b> Guide the students on how conduct preventive maintenance of hock cutters / scalping equipment	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Check power, straightness and roughness</li> <li>• Clean the blade sharpener</li> <li>• Replace saw blade sharpener</li> <li>• Store blade sharpener</li> </ul>	Hock cutters / scalping equipment maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform maintenance of hock cutters / scalping equipment  <b>Principles:</b> The students should explain the principles performing preventive maintenance of hock cutters / scalping equipment  <b>Theories:</b> The students should explain importance of performing preventive of hock cutters / scalping equipment	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Lubricants</li> <li>• Spanners</li> <li>• Spare parts:</li> <li>• Coolant</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(d) Performing preventive maintenance of blade saw sharpener	<b>Brainstorm:</b> Guide the students to define scalping equipment  <b>Site visit:</b> Visit the nearby slaughter house to observe preventive maintenance of blade sharpener  <b>Practical work</b> Guide the students on how conduct preventive maintenance of blade saw sharpener	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Check power, straightness and roughness</li> <li>• Clean the blade sharpener</li> <li>• Replace saw blade sharpener</li> <li>• Store blade sharpener</li> </ul>	Blade saw sharpener maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform maintenance of blade saw sharpener  <b>Principles:</b> The students should explain the principles performing preventive maintenance of blade saw sharpener  <b>Theories:</b> The students should explain importance of performing preventive blade saw sharpener	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Lubricants</li> <li>• Spanners</li> <li>• Spare parts:</li> <li>• Electric testers</li> <li>• Coolant</li> </ul>	
		(e) Performing	<b>Brainstorm:</b> Guide the students to	<b>The students should be able to:</b>	Brisket and splitting saws according to	<b>Knowledge evidence:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		preventive maintenance of brisket and splitting saws	<p>define brisket and splitting saws</p> <p><b>Field visit:</b></p> <p>Visit the nearby slaughter house to observe preventive maintenance of brisket and splitting saws</p> <p><b>Practical work;</b></p> <p>Guide the students on how conduct preventive maintenance brisket and splitting saws</p>	<ul style="list-style-type: none"> <li>• Check and test the strength of saws</li> <li>• Check sharpness of blades</li> <li>• Clean saws</li> <li>• Disassemble the splitting saw</li> <li>• Dry saws</li> </ul>	the required standards	<p><b>Detailed knowledge of:</b></p> <p><b>Method used::</b> The students should explain how to perform maintenance of brisket and splitting saws</p> <p><b>Principles:</b> The students should explain the principles of checking strengths of brisket and splitting saws</p> <p><b>Theories:</b> The students should explain importance of performing preventive maintenance of brisket and splitting saws</p>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Lubricants</li> <li>• Spanners</li> <li>• Spare parts:</li> <li>• Electric testers</li> <li>• Saw blade sharpener</li> <li>• Brushes</li> </ul>	
		(f) Performing preventive maintenance of	<b>Brainstorm:</b> Guide the students to define carcass and tripe cleaning machines	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Inspect to check power of the machine</li> </ul>	Carcass and tripe cleaning machines maintained according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should</p>	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		carcass and tripe cleaning machines	<b>Site visit:</b> Visit the nearby slaughter house to observe preventive maintenance of carcass and tripe cleaning machines  <b>Practical work:</b> Guide the students on how conduct preventive maintenance carcass and tripe cleaning machines	<ul style="list-style-type: none"> <li>• Check heat and suction of the body cleaning machine</li> <li>• Clean the machine</li> <li>• Sanitize the machines</li> </ul>		explain how to perform maintenance carcass and tripe cleaning machines  <b>Principles:</b> The students should explain the principles of checking strengths, power suction of carcass and tripe cleaning machines  <b>Theories:</b> The students should explain importance of performing preventive maintenance of carcass and tripe cleaning machines	The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Lubricants</li> <li>• Blade sharpener</li> <li>• Spare parts:</li> <li>• Hydraulic oil</li> <li>• Brushes</li> <li>• Food grade detergents</li> <li>• Electric tester</li> <li>• Spanners</li> </ul>	
	3.4 Performing preventive maintenance of cutlets and meat products making equipment	(a) Performing preventive maintenance of a grinder	<b>Brainstorm:</b> Guide the students to explain grinder /mincer machine  <b>Site visit:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Clean machines</li> <li>• Lubricate moving parts</li> <li>• Inspect and make adjustments</li> </ul>	Grinder /mincer machine maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used::</b> The students should explain how to perform	This element can be achieved at a work place or training institution.  The following tools, equipment and	90

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				Process Assessment	Services Assessment	Knowledge Assessment		
		/mincer machine	<p>Visit the nearby meat processing facility and observe preventive maintenance of grinder /mincer machine</p> <p><b>Practical work:</b> Guide the students on how conduct preventive maintenance of grinder /mincer machine</p>	<ul style="list-style-type: none"> <li>• Replace worn out parts</li> </ul>		<p>maintenance a grinder /mincer machine</p> <p><b>Principles:</b> The students should explain the principles of checking and making adjustment of machines</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Importance maintaining a grinder /mincer</li> <li>• Causes of breakdown to mincers</li> </ul>	<p>safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Lubricants</li> <li>• Mincer spanners</li> <li>• Food grade detergent</li> <li>• Alcohol/spirit/ disinfectants</li> <li>• Brushes: iron and soft</li> <li>• Clean and dry cloth</li> </ul>	
		(b) Performing preventive maintenance of a band saw	<p><b>Brainstorm:</b> Guide the students to explain band saw</p> <p><b>Site visit:</b> Visit the nearby meat processing facility and observe preventive</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Assemble and disassemble band saw</li> <li>• Inspect and check blade condition</li> <li>• Check alignment, tension and tracking</li> </ul>	Band saw maintained according to the required standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used::</b> The students should explain how to maintain band saw</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Blades</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			maintenance band saw  <b>Practical work:</b> Guide the students on how conduct preventive of maintenance band saw	<ul style="list-style-type: none"> <li>• Clean and remove sawdust from Wheel and tires</li> <li>• Inspect and replace the cracked, worn out, or slipping rubber</li> <li>• Check and adjust lower and upper guides</li> <li>• Lubricate moving parts</li> <li>• Inspect and check the saw blade tension</li> <li>• Check wiring and connections</li> </ul>		<b>Principles:</b> The students should explain the principles of checking saw blade tension  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Procedure for inspecting preventive maintenance</li> <li>• Importance of maintaining band saw</li> <li>• Cleaning band saw</li> <li>• Assembling and disassembling band saw</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Specifications and quality of different band saw spare parts	<ul style="list-style-type: none"> <li>• Cold and hot water</li> <li>• Spanners</li> <li>• Brushes:</li> <li>• Disinfectants</li> <li>• Detergents</li> <li>• Clean and dry cloth</li> <li>• Food grade hydraulic oil</li> <li>• Food grade grease</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(c) Performing preventive maintenance of an emulsion bowl cutter	<p><b>Brainstorm:</b> Guide the students to explain an emulsion bowl cutter</p> <p><b>Site visit:</b></p> <p>Visit the nearby meat processing facility and observe preventive maintenance an emulsion bowl cutter</p> <p><b>Practical work:</b></p> <p>Guide the students on how conduct preventive of maintenance an emulsion bowl cutter</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Clean the bowl cutter regularly</li> <li>• Rinse the bowl cutter</li> <li>• checks to verify the condition of blades, seals and other components</li> <li>• Replace worn out parts.</li> <li>• Check wire connections and source of power</li> <li>• Sanitize the bowl cutter</li> </ul>	Emulsion bowl cutter maintained according to the required standards	<p><b>Knowledge evidence of:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to:</p> <ul style="list-style-type: none"> <li>• Clean emulsion bowl cutter</li> <li>• check condition of blade, seals and other components</li> <li>• Lubricate moving parts</li> </ul> <p><b>Principles:</b> The students should explain the principles of sanitizing emulsion bowl choppers.</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Procedure of inspecting and making preventive maintenance of emulsion bowl chopper</li> <li>• Importance of maintaining an</li> </ul>	<p>Allen keys/hex wrenches</p> <ul style="list-style-type: none"> <li>• Wrenches</li> <li>• Pliers</li> <li>• Torque wrench</li> <li>• Multimeter</li> <li>• Bearing pull</li> <li>• Grease gun</li> <li>• Air compressor</li> <li>• Vacuum cleaner</li> <li>• Mop, sponge and cleaning clothes.</li> <li>• Food grade grease</li> <li>• Food grade detergents</li> <li>• Food grade disinfectant</li> <li>• Blade sharpening.</li> <li>• Replacement parts: blades, seals, gasket, bearings.</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						emulsion bowl chopper  <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Unusual noises or vibrations ( motor problems or misalignment).		
		(d) Performing preventive maintenance of a sausage-stuffer machine	<b>Brainstorm:</b> Guide the students to explain sausage-stuffer machine  <b>Site visit:</b> Visit the nearby meat processing facility and observe preventive maintenance sausage-stuffer machine  <b>Practical work:</b> Guide the students on how conduct preventive of maintenance	<b>The students should be able to:</b> •Identify types of sausage-stuffer machine •Disconnect the stuffer from power supply •Disassemble sausage-stuffer machine •Clean all internal and external components •Inspect for wear and tear of components •Replace worn-out parts or components	Sausage-stuffer machine maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to performing preventive maintenance of a sausage-stuffer machine <b>Principles:</b> The students should explain the principles of inspecting wear and tear of components	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  •Screw drivers •Allen keys/hex wrenches •Wrenches •Pliers •Torque wrench •Bearing puller •Multimeter •Grease gun •Air compressor •Mop, sponge and cleaning clothes.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			sausage-stuffer machine	<ul style="list-style-type: none"> <li>• Reassemble the stuffer</li> <li>• Test the equipment</li> </ul>		<b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Types of sausage-stuffer machine.</li> <li>• Importance of testing of equipment before use.</li> <li>• Clean sausage-stuffer machine</li> <li>• Disassemble/ reassemble sausage-stuffer machine</li> </ul>	<ul style="list-style-type: none"> <li>• Food grade grease</li> <li>• Food grade detergents</li> <li>• Food grade disinfectant</li> </ul>	
		(e) Perform in preventive maintenance of vacuum packing machine	<b>Brainstorm:</b> Guide the students to explain vacuum packing machines  <b>Site visit:</b> Visit the nearby meat processing facility and observe preventive maintenance vacuum packing machines	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify types of vacuum packing machine</li> <li>• Disconnect the vacuum packing machines from power supply</li> <li>• Clean all internal and external components</li> <li>• Inspect for wear and tear of components</li> </ul>	vacuum packing machines maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to perform preventive maintenance of vacuum packing  <b>Principles:</b> The students should explain the principles of	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Screw drivers</li> <li>• Allen keys/hex wrenches</li> <li>• Wrenches</li> <li>• Pliers</li> <li>• Torque wrench</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b> Guide the students on how conduct preventive of maintenance vacuum packing machine	<ul style="list-style-type: none"> <li>• Replace worn-out parts or component</li> <li>• Test the vacuum packing machines</li> <li>• Sanitize the equipment</li> </ul>		inspecting wear and tear of components  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Types of sausage-stuffer machine</li> <li>• Importance of testing of equipment before use.</li> <li>• Clean vacuum packing machines</li> <li>• Sanitize vacuum packing machine</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Specifications and quality of different vacuum pack spare parts	<ul style="list-style-type: none"> <li>• Bearing puller</li> <li>• Multimeter</li> <li>• Grease gun</li> <li>• Air compressor</li> <li>• Mop, sponge and cleaning clothes.</li> <li>• Food grade grease</li> <li>• Food grade detergents</li> </ul>	
	3.5 Perform preventive maintenance of cold room facilities and	(a) Performing preventive maintenance of cold	<b>Brainstorm:</b> Guide the students to explain cold room facilities  <b>Site visit:</b>	<b>The students should be able to:</b>  <ul style="list-style-type: none"> <li>• Clean cold room</li> <li>• Inspect door seals of cold room</li> </ul>	Cold room maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should	This element can be achieved at a work place or training institution.  The following tools, equipment and	37

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
	maintaining inventory	room facilities	<p>Visit the nearby meat processing facility and observe preventive maintenance cold room facilities</p> <p><b>Practical work:</b> Guide the students on how conduct preventive of maintenance cold room facilities</p>	<ul style="list-style-type: none"> <li>• Check and identify any air leaks</li> <li>• Dispose overstayed products</li> <li>• Maintain dry condition in a cold room</li> <li>• Minimize use of paper and wood in a cold room</li> <li>• Refill</li> </ul>		<p>explain how to performing preventive maintenance of cold room facilities</p> <p><b>Principles:</b> The students should explain the principles of setting maintenance schedule for maintaining cold rooms</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Major components of cold rooms and their functions.</li> <li>• Roles of a meat processor / students in cold room safety</li> <li>• Clean a cold room</li> <li>• Perform preventive maintenance of a cold room</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p>	<p>safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Electrical tester,</li> <li>• Screw driver,</li> <li>• Spanners,</li> <li>• Brushes</li> <li>• Thermometer</li> <li>• High pressure cleaners,</li> <li>• Gas pots of their type</li> <li>• Clean and dry cloth, f</li> <li>• Food grade hydraulic oil</li> <li>• Food grade grease/lubricants</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						Occupational cold or chiller room hazards		
		(b) Maintaining meat processing inventory	<p><b>Brainstorm:</b> Guide the students to define inventory, direct raw materials goods</p> <p><b>Site visit:</b></p> <p>Visit the nearby meat processing facility, walk around and fill the inventory sheet including all and machines, equipment/machines available</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify raw materials inventory</li> <li>• Identify work-in-progress (WIP) inventory</li> <li>• Identify finished goods</li> <li>• Identify equipment and machinery</li> </ul>	Prepared meat processing inventory accommodates the required basic information	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to maintain meat processing inventory</p> <p><b>Principles:</b> The students should explain the principles identify work-in-progress inventory</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Benefits of meat processing inventory</li> <li>• Prepare meat inventory</li> <li>• Mark different types of inventories.</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• Pen</li> <li>• Book</li> <li>• Clean and dry cloth, f</li> <li>• Food grade hydraulic oil</li> <li>• Food grade grease/lubricants</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
4.0 Performing basic meat classification	4.1 Performing meat classification according to type	(a) Classifying red meat	<p><b>Brainstorm:</b></p> <p>Guide the students to define meat, red meat, myoglobin, beef, chevon, mutton, pork</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to read and discuss the characteristics of red meat, to identify the red meat</p> <p><b>Practical work:</b></p> <p>Guide the students to perform classification of red meat</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Determine the source animal</li> <li>•Examine age of the animal</li> <li>•Identify and classify the red meat</li> <li>•Observe health and safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment, and workplace</li> <li>•Store tools and equipment</li> </ul>	Red meat classified as per the required market standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to classify red meat.</p> <p><b>Principles:</b> The student should explain the principles involved in classifying red meat</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Advantages of classifying red meat</li> <li>•Classes of red meat</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about type of animals,</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Meat from cattle</li> <li>•Meat from goats</li> <li>•Meat from sheep</li> </ul> <p>Meat from pig</p>	93

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						animal feeds and feeding		
		(b) Classifying white meat	<p><b>Brainstorm:</b></p> <p>Guide the students to define Calories, Saturated fat acids, poultry meat,</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to read and discuss the characteristics of white meat, to identify the white meat, and advantages of eating white meat</p> <p><b>Practical work:</b></p> <p>Guide the students to perform classification of white meat</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Determine the source animal</li> <li>•Examine age of the animal</li> <li>•Identify and classify the white meat</li> <li>•Observe health and safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	White meat classified as per the required market standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to classify white meat.</p> <p><b>Principles:</b> The student should explain the principles involved in classifying white meat</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Advantages of eating white meat</li> <li>•Classes of white meat</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about</b></p> <p>type of animals,</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Meat from poultry</li> <li>•Meat from rabbits</li> <li>•Meat from fish</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						animal feeds and feeding		
		(c) Classifying processed meat	<p><b>Brainstorm:</b></p> <p>Guide the students to define processed meat, curing, smoking, salting</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to read and discuss benefits of processed meat, identify types of processed meat</p> <p><b>Demonstration:</b></p> <p>Demonstrate different types of processed meat</p> <p><b>Practical work:</b></p> <p>Guide the students to perform</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Identify the source of meat</li> <li>•Identify type of processing</li> <li>•Identify ingredients used</li> <li>•Identify and classify the processed meat</li> <li>•Observe health and safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Processed meat classified as per the required market standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to classify processed meat</p> <p><b>Principles:</b> The student should explain the principals involved in classifying processed meat</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Methods of processing meat</li> <li>•Advantages of Classifying processed meat</li> <li>•Types of processed meat</li> </ul> <p><b>Circumstantial knowledge</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•fermented salami</li> <li>•smoked meat</li> <li>•salted meat</li> <li>•ham meat</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			classification of processed meat			<b>Detailed knowledge about</b> <ul style="list-style-type: none"> <li>•Poor handling of meat during processing</li> <li>•Poor storage</li> </ul>		
		(d) Classifying edible slaughter by-product	<b>Brainstorm:</b>  Guide the students to define edible slaughter by-products, red offal green offal  <b>Site visit:</b>  Organize the students in manageable groups to identify edible slaughter by-product and collect them  <b>Practical work:</b>  Guide the students to perform classification of edible slaughter by-product	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Identify the animal source</li> <li>•Identify type of by-product</li> <li>•Assess safety and edibility</li> <li>•Identify and classify edible slaughter by-product</li> <li>•Observe health and safety precautions</li> <li>•Keep records</li> <li>•Clean tools, equipment, and workplace</li> </ul>	Edible slaughter by-products classified as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to classify edible slaughter by-product  <b>Principles:</b> The student should explain the principles involved in classifying edible slaughter by-product  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Advantages of edible slaughter by-product</li> <li>•Types of slaughter by products</li> </ul>	This element can be achieved at a work place or training institution. The following tools, equipment and safety gear are to be available:- Record book <ul style="list-style-type: none"> <li>•Cap or helmet</li> <li>•Gum boots</li> <li>•Plastic overall/gown</li> <li>•White coat/t-shirt/shirt</li> <li>•Plastic apron</li> <li>•Iron gloves</li> <li>•Brain</li> <li>•Tongue</li> <li>•Trotters</li> <li>•Oxtail</li> <li>•Liver</li> <li>•Kidney</li> <li>•Lungs</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Handling of slaughter edible by- products</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> Poor handling of meat during processing</p>	<ul style="list-style-type: none"> <li>• Lard</li> <li>• Tallow</li> <li>• Tripes</li> <li>• Intestine</li> </ul>	
	4.2 Performing classification of meat according to source	(a) Classifying carcass according to animal species	<p><b>Brainstorm:</b></p> <p>Guide the students to define whole carcass, and split carcass</p> <p><b>Farm visit:</b></p> <p>Organize the students in manageable groups to identify different species of animal, slaughter them and classify the carcasses according to their origin</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils, and safety gear</li> <li>• Identify the animal species</li> <li>• Examine anatomical features</li> <li>• Determine the meat colour and texture</li> <li>• Identify and classify carcass according to animal species</li> </ul>	Carcasses classified according to animal species as per instruction	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify carcasses according to animal species</p> <p><b>Principles:</b> The student should explain the principles involved in classifying carcass according to animal species</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> </ul>	69

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b>  Guide the students to perform classification of carcass according to animal species	<ul style="list-style-type: none"> <li>• Observe health and safety precautions</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Advantages of Classifying carcass according to animal species</li> <li>• Classifying carcass according to animal species</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> type of animals, animal feeds and feeding	<ul style="list-style-type: none"> <li>• Carcass from cattle</li> <li>• Carcass from goats</li> <li>• Carcass from sheep</li> <li>• Carcass from pig</li> </ul>	
		(b) Classifying poultry meat.	<b>Brainstorm:</b>  Guide the students to define broiler, spent layer, and poultry  <b>Poultry unit visit:</b>  Organize the students in manageable groups to identify different	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify type of poultry, age</li> <li>• Identify and classify poultry meat</li> </ul>	Poultry meat classified as per instruction.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify poultry meat  <b>Principles:</b> The student should explain the principles involved	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			species of poultry, slaughter them  <b>Practical work:</b>  Guide the students to Classify poultry meat	<ul style="list-style-type: none"> <li>• Observe health and safety precautions</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		in classifying poultry meat  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Advantages of Classifying poultry meat</li> <li>• Classifying poultry meat</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> species of poultry and their availability,	<ul style="list-style-type: none"> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Meat from broilers</li> <li>• Meat from dual purpose breed</li> <li>• Meat from spent layer</li> <li>• Meat from local chicken</li> <li>• Meat from turkey</li> <li>• Meat from guinea fowl</li> <li>• Meat from duck</li> </ul>	
		(c) Classifying fish meat.	<b>Brainstorm:</b>  Guide the students to define marine fish, codfish, and freshwater fish  <b>Visit fish market:</b>  Organize the students in manageable groups	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Identify the species of fish</li> <li>• Examine the size and the age of fish</li> </ul>	Fish meat classified as per instruction.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify fish meat  <b>Principles:</b> The student should explain the principles involved	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			to identify different species of fish  <b>Practical work:</b>  Guide the students on how to classify fish meat	<ul style="list-style-type: none"> <li>• Identify and classify cuts of fish</li> <li>• Observe health and safety precautions</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		in classifying fish meat  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Advantages of classifying fish meat</li> <li>• Classifying fish meat</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> origin of the fish and their availability,	<ul style="list-style-type: none"> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• Different types of fish</li> </ul>	
	4.3 Performing classification of meat according to grades	(a) Classifying prime grade meat and cuts	<b>Brainstorm:</b>  Guide the students to define prime, meat cuts,  <b>Visit meat cuts retail shops:</b>  Organize the students in manageable groups to identify beef	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Understand the types of grading systems</li> <li>• Assessing Tenderness and Texture</li> </ul>	Prime grade meat and cuts classified as per instruction.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify prime grade meat and cuts  <b>Principles:</b> The student should explain the	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Record book</li> <li>• Cap or helmet</li> <li>• Gum boots</li> </ul>	69

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			prime cuts, pork prime cuts, lamb prime cuts, and poultry prime cuts  <b>Practical work:</b>  Guide the students to perform Classifying prime grade meat, and cuts	<ul style="list-style-type: none"> <li>Identify and classify prime grade meat and cuts</li> <li>Observe health and safety precautions</li> <li>Keep records</li> <li>Clean tools, equipment and workplace</li> <li>Store tools, and equipment</li> </ul>		principles involved in classifying prime grade meat and cuts <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>Factors affecting meat grading</li> <li>Classifying prime grade meat and cuts</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> the use of different standards from different countries	<ul style="list-style-type: none"> <li>Plastic overall/gown</li> <li>White coat/t-shirt/shirt</li> <li>Plastic apron</li> <li>Iron gloves</li> <li>beef ribeye</li> <li>beef filet</li> <li>strip steak</li> <li>T-bone meat</li> <li>pork tenderloin</li> <li>pork chop</li> <li>leg of lamb</li> <li>poultry breast meat</li> <li>poultry thigh meat</li> </ul>	
		(b) Classifying choice grade meat and cuts	<b>Brainstorm:</b>  Guide the students to define choice grade meat,  <b>Visit supermarket:</b>  Organize the students in manageable groups to identify beef	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>Organize work tools, equipment, utensils and safety gear</li> <li>Understand the grading systems</li> <li>Identify different cuts</li> </ul>	Choice grade meat and cuts classified as per instruction.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify choice grade meat and cuts  <b>Principles:</b> The student should	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>Record book</li> <li>Cap or helmet</li> <li>Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			choice cuts, pork choice cuts, lamb choice cuts and poultry choice cuts  <b>Practical work:</b>  Guide the students to perform Classifying choice grade meat and cuts	<ul style="list-style-type: none"> <li>Identify and classify choice grade meat and cuts</li> <li>Observe health and safety precautions</li> <li>Keep records</li> <li>Clean tools, equipment and workplace</li> <li>Store tools and equipment</li> </ul>		explain the principles involved in classifying choice grade meat and cuts  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>Characteristics of choice grade meats and cuts</li> <li>Classifying choice grade meat and cuts</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> the use of different standards from different countries	<ul style="list-style-type: none"> <li>Plastic overall/gown</li> <li>White coat/t-shirt/shirt</li> <li>Plastic apron</li> <li>Iron gloves</li> <li>flank steak</li> <li>beef tri-tip meat</li> <li>brisket meat</li> </ul>	
		(c) Classifying standard and commercial grade meat.	<b>Brainstorm:</b>  Guide the students to define standard and commercial grade meat  <b>Visit meat cuts retail shops:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>Organize work tools, equipment, utensils and safety gear</li> <li>Understand the types of grading systems</li> </ul>	Standard and commercial grade meat classified as per instruction.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to Classify standard and commercial grade meat	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Organize the students in manageable groups to identify standard and commercial grade meat</p> <p><b>Practical work:</b></p> <p>Guide the students to perform Classifying standard and commercial grade meat</p>	<ul style="list-style-type: none"> <li>• Identify meat cuts</li> <li>• Identify and classify standard and commercial grade meat</li> <li>• Observe health and safety precautions</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<p><b>Principles:</b> The student should explain the principals involved in classifying standard and commercial grade meat</p> <p><b>Theories:</b> The students should explain characteristics of standard and commercial grade meat</p> <ul style="list-style-type: none"> <li>• Benefits of classifying meat</li> <li>• Classifying standard and commercial grade meat</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> the use of different standards from different countries</p>	<ul style="list-style-type: none"> <li>• Cap or helmet</li> <li>• Gum boots</li> <li>• Plastic overall/gown</li> <li>• White coat/t-shirt/shirt</li> <li>• Plastic apron</li> <li>• Iron gloves</li> <li>• ground meat</li> <li>• brisket meat from older beef cattle</li> <li>• Shows shoulder meat</li> </ul>	



### Form Three

**Table 5: Detailed Contents for Form Three**

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
1.0 Processing slaughter by-products and maintaining cold chain	1.1 Processing of edible by-products	(a) Processing of offal	<p><b>Brainstorm:</b></p> <p>Guide the students to define offal</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to identify equipment used in processing offal</p> <p><b>Demonstration:</b></p> <p>Demonstrate to students on how to process offal</p> <p><b>Practical work:</b></p> <p>Guide the students on how to perform Processing of offal's</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify tools, equipment and safety gear</li> <li>• Prepare offal</li> <li>• Process offal</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and working place</li> <li>• Store tools and equipment</li> </ul>	Offal's, prepared according to the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to process offal</p> <p><b>Principles:</b> The students should explain principle involved in processing offal</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• How to prepare offal</li> <li>• Types or components of offal.</li> <li>• Identify suitable green offal for making casings</li> <li>• Importance of proper handling of offal</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Effects of microbes in green offal</li> <li>• Gastrointestinal anatomy</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• De-boning tables</li> <li>• Carrying vessels</li> <li>• Knives</li> <li>• Cooking pot</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• White trouser</li> <li>• White coat</li> <li>• Plastic overall</li> </ul>	149

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(b) Processing of head	<p><b>Study visit:</b> Organize the students in manageable groups to visit a nearby slaughterhouse and observe processing of heads</p> <p><b>Demonstration:</b> Demonstrate to students on how to process head</p> <p><b>Practical work:</b> Guide the students to preparation of head</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify tools, equipment and safety gear</li> <li>• Prepare head</li> <li>• Skin the head</li> <li>• De hair head</li> <li>• Wash head</li> <li>• De bone head</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment, and working place</li> <li>• Store tools and equipment</li> </ul>	Head prepared for retail according to the required standard	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to process the head</p> <p><b>Principles:</b> The students should explain the principle related to processing of the head.</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Types of animal heads</li> <li>• Importance of observing procedures during processing head</li> <li>• Methods used in processing heads</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Anatomy of an animal head.</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Carrying vessels</li> <li>• Knives</li> <li>• Cooking pot</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• White trouser</li> <li>• White coat</li> <li>• Plastic overall</li> </ul>	
		(c) Processing of trotters, tail, and tongue	<p><b>Brainstorm:</b> Guide the students to define trotters, tail, tongue</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify tools, equipment and safety gear</li> </ul>	Trotters, tail and tongue processed according to the required standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to process head, trotters and tail</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Demonstration:</b> Demonstrate to students on how to process tail and tongue  <b>Practical work:</b> Guide the students to perform processing of trotters, tail and tongue	<ul style="list-style-type: none"> <li>• Prepare tongue, head and trotter for retails</li> <li>• Boil scalding water</li> <li>• Perform scalding</li> <li>• Perform singeing</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and working place</li> <li>• Store tools and equipment</li> </ul>		<b>Principles:</b> The students should explain the principle involved in processing trotters, tail and tongue.  <b>Theories:</b> The students should explain:- <ul style="list-style-type: none"> <li>• Methods used in processing trotters and tails.</li> <li>• Importance of observing hygiene in processing slaughter by-products</li> <li>• Taste of scalded and singed trotters.</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Food handling, hygiene rules and regulations	and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Carrying vessels</li> <li>• Knives</li> <li>• Cooking pot</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• White trouser</li> <li>• White coat</li> <li>• Plastic overall</li> </ul>	

		(d) Making natural casing	<p><b>Brainstorm:</b></p> <p>Guide the students to define casing, natural and artificial casing</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to identify green offal for making casing</p> <p><b>Practical work:</b></p> <p>Guide the students on how to make natural casing</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify tools, equipment and safety gear</li> <li>• Prepare selected intestine</li> <li>• Scrap the intestine coat</li> <li>• Wash the scraped intestine</li> <li>• Preserve the casings</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment, and working place</li> <li>• Store tools and equipment</li> </ul>	Natural casing made according to the required standard	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to prepare casings in different ways.</p> <p><b>Principles:</b> The students should explain the principle related to preparation of natural casing</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Methods of making casing</li> <li>• Suitable green offal for casings</li> <li>• Importance of observing hygiene in making casing</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Effects of microbes in green offal</li> <li>• Anatomy of the digestive system.</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• De-boning tables</li> <li>• Carrying vessels</li> <li>• Knives</li> <li>• Cooking pot</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Gum boots</li> <li>• White trouser</li> <li>• White coat</li> <li>• Plastic overall</li> </ul>	
	1.2 Curing and preserving	(a) Making blood and	<p><b>Brainstorm:</b></p>	<p><b>The students should be able to:</b></p>	• Blood and bone meal made	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p>	This element can be achieved at a work	224

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
	inedible by-products	bones meal	<p>Guide the students to define blood meal, and bone meal</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to discuss on how to collect bone and blood from abattoir for making blood and bone meal</p> <p><b>Demonstration:</b></p> <p>Demonstrate to students on how to process blood and bones meal</p> <p><b>Practical work:</b></p> <p>Guide the students on how to make blood and bones meal</p>	<ul style="list-style-type: none"> <li>• Prepare workplace</li> <li>• Organize work tools, equipment, and machines</li> <li>• Dry blood and bone</li> <li>• Prepare blood meal</li> <li>• Grind bone</li> <li>• Prepare bone meal</li> <li>• Observe health and safety precautions</li> <li>• Clean workplace, tools, equipment, and machines</li> <li>• Sterilize tools and equipment</li> <li>• Store tools and equipment</li> </ul>	according to the required standards	<p><b>Method used:</b> The students should explain how to prepare blood and bone meal</p> <p><b>Principles:</b> The students should explain the principles related to preparations of blood and bones meal</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of boiling blood</li> <li>• Essential nutrients in blood and bone meals</li> <li>• Packing and preservation of blood and bone meal.</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Deterioration nature of slaughter by products</li> <li>• Safe handling of slaughter by-products</li> </ul>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Knives</li> <li>• Boiling tank and separator machine</li> <li>• Wheelbarrow</li> <li>• Carrying vessels</li> <li>• Mop and squeezer</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Hard and soft brooms</li> <li>• Brushes</li> <li>• Spade</li> <li>• Rake</li> <li>• Mask</li> <li>• Gum boots</li> <li>• Over roll</li> <li>• Gloves</li> <li>• Plastic apron</li> <li>• Cap or helmet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(b) Curing skins and hides	<p><b>Brainstorm:</b></p> <p>Guide the students to define hide, and skin</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to discuss on how to collect skins and hides for curing</p> <p><b>Demonstration:</b></p> <p>Demonstrate to students on how to Curing skins and hides</p> <p><b>Practical work:</b></p> <p>Guide the students on how to cure skins and hides</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare workplace</li> <li>• Organize work tools, equipment and machines</li> <li>• Perform air drying curing of hides and skins</li> <li>• Perform salt curing of hides and skins</li> <li>• Store hides and skins</li> <li>• Observe health and safety precautions</li> <li>• Clean workplace, tools, equipment and machines</li> <li>• Sterilize tools and equipment</li> <li>• Store tools and equipment</li> </ul>	Hides and skin cured according to the recommended standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to cure hides and skins.</p> <p><b>Principles:</b> The students should explain the principles related to curing of hides and skins</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Causes of defects in skin and hides</li> <li>• Economic importance of hides and skins</li> <li>• Differences between air and salt dried hides and skins</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Deterioration nature of slaughter by products</li> <li>• Anatomy of integumentary system</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Knives</li> <li>• Boiling tank and separator machine</li> <li>• Wheelbarrow</li> <li>• Carrying vessels</li> <li>• Mop and squeezer</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Hard and soft brooms</li> <li>• Brushes</li> <li>• Spade</li> <li>• Rake</li> <li>• Mask</li> <li>• Gum boots</li> <li>• Over roll</li> <li>• Gloves</li> <li>• Plastic apron</li> <li>• Cap or helmet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(c) Preparing hooves and horns	<p><b>Brainstorm:</b></p> <p>Guide the students to define hooves and horns</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups on how to collect hooves and horns</p> <p><b>Practical work:</b></p> <p>Guide the students on how to prepare hooves and horns</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare workplace</li> <li>• Organize work tools, equipment and machines</li> <li>• Prepare hooves and horn</li> <li>• Scrap horns and hooves to remove debris</li> <li>• Dry hooves and horns</li> <li>• Observe health and safety precautions</li> <li>• Clean workplace, tools and equipment</li> <li>• Sterilize tools and equipment</li> <li>• Store tools and equipment</li> </ul>	Hooves and horn prepared according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to prepare hooves and horns</p> <p><b>Principles:</b> The students should explain the principles related to</p> <ul style="list-style-type: none"> <li>• Preparations of hooves and horns</li> <li>• Theories: The students should explain:-</li> <li>• Economical uses of horns and hooves</li> <li>• Methods of removing horns from the skull.</li> <li>• Preservation of hooves and horns</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Deterioration nature of slaughter by products</li> <li>• Safe handling of slaughter by-products</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Knives</li> <li>• Boiling tank and separator machine</li> <li>• Wheelbarrow</li> <li>• Carrying vessels</li> <li>• Mop and squeezer</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Hard and soft brooms</li> <li>• Brushes</li> <li>• Spade</li> <li>• Rake</li> <li>• Mask</li> <li>• Gum boots</li> <li>• Over roll</li> <li>• Gloves</li> <li>• Plastic apron</li> <li>• Cap or helmet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(d) Preserving glands and organs	<p><b>Brainstorm:</b></p> <p>Guide the students to define glands, and organs</p> <p><b>Study visit:</b></p> <p>Organize the students in manageable groups to visit a nearby slaughterhouse and collect glands and organs</p> <p><b>Practical work:</b></p> <p>Guide the students to preserve glands and organs</p>	<p><b>The Students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare workplace</li> <li>• Organize work tools, equipment and machines</li> <li>• Trim unwanted tissues from glands</li> <li>• Preserve glands and lymph nodes</li> <li>• Observe health and safety precautions</li> <li>• Clean workplace, tools, equipment, and machines</li> <li>• Sterilize tools and equipment</li> <li>• Store tools and equipment</li> </ul>	Glands and organs preserved according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to preserve glands and organs</p> <p><b>Principles:</b> The students should explain the principles related to preserve of glands and organs</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Economic importance of glands</li> <li>• Preservation Methods of glands</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Anatomy of the lymphatic system</li> <li>• Safe handling of slaughter by-products</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Knives</li> <li>• Boiling tank and separator machine</li> <li>• Wheelbarrow</li> <li>• Carrying vessels</li> <li>• Mop and squeezer</li> <li>• Buckets</li> <li>• Dust bins</li> <li>• Hard and soft brooms</li> <li>• Brushes</li> <li>• Spade</li> <li>• Rake</li> <li>• Mask</li> <li>• Gum boots</li> <li>• Over roll</li> <li>• Gloves</li> <li>• Plastic apron</li> <li>• Cap or helmet</li> </ul>	
		(e) Grading skins and hides	<p><b>Brainstorm:</b></p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare workplace</li> </ul>	Hides and skins graded according to the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p>	<p>This element can be achieved at a work</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Guide the students to define grading</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups on how to collect hides and skin</p> <p><b>Practical work:</b></p> <p>Guide the students on how to grade hides and skin</p>	<ul style="list-style-type: none"> <li>•Organize work tools, equipment and machines</li> <li>•Identify and prepare hides and skins</li> <li>•Evaluate quality hides and skins</li> <li>•Observe health and safety precautions</li> <li>•Clean workplace, tools, equipment and machines</li> <li>•Sterilize tools and equipment</li> <li>•Store tools and equipment</li> </ul>		<p><b>Method used:</b> The students should explain how grade hides and skins</p> <p><b>Principles:</b> The students should explain the principles related to the grading of hides and skins</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Causes of defects in skin and hides</li> <li>•Economic importance of hides and skins</li> <li>•Differences between air and salt dried hides and skins</li> <li>•Common skin and hides defects</li> <li>•Grades of skin and hides</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Deterioration nature of slaughter by products</li> <li>•Anatomy of integumentary Safe hand</li> </ul>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Knives</li> <li>•Boiling tank and separator machine</li> <li>•Wheelbarrow</li> <li>•Carrying vessels</li> <li>•Mop and squeezer</li> <li>•Buckets</li> <li>•Dust bins</li> <li>•Hard and soft brooms</li> <li>•Brushes</li> <li>•Spade</li> <li>•Rake</li> <li>•Mask</li> <li>•Gum boots</li> <li>•Over roll</li> <li>•Gloves</li> <li>•Plastic apron</li> <li>•Cap or helmet</li> </ul>	
		(f) Storing skins and hides	<b>Brainstorm:</b>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Prepare workplace</li> </ul>	Hides and skins stored according to the	<b>Knowledge evidence: Detailed knowledge of:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>Guide the students to define skins, and hide</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups on how to collect hides and skin</p> <p><b>Practical work:</b></p> <p>Guide the students to store hides, and skins</p>	<ul style="list-style-type: none"> <li>•Organize work tools, and equipment</li> <li>•Prepare store</li> <li>•Control pests</li> <li>•Store hides and skins</li> <li>•Observe health and safety precautions</li> <li>•Clean workplace, tools, equipment, and machines</li> <li>•Sterilize tools and equipment</li> <li>•Store tools and equipment</li> </ul>	recommended standards	<p><b>Method used:</b> The students should explain how to store hides and skins.</p> <p><b>Principles:</b> The students should explain the principles related to storage of hides and skins</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>•Storage methods of hides and skins</li> <li>•Importance of proper storage of hides and skins.</li> <li>•Storage pests and how to control them</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Basic knowledge of pharmacology</li> <li>•Basic knowledge of parasitology.</li> </ul>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Knives</li> <li>•Boiling tank and separator machine</li> <li>•Wheelbarrow</li> <li>•Carrying vessels</li> <li>•Mop and squeezer</li> <li>•Buckets</li> <li>•Dust bins</li> <li>•Hard and soft brooms</li> <li>•Brushes</li> <li>•Spade</li> <li>•Rake</li> <li>•Mask</li> <li>•Gum boots</li> <li>•Over roll</li> <li>•Gloves</li> <li>•Plastic apron</li> <li>•Cap or helmet</li> </ul>	
	1.3 Maintaining cold chain for meat and meat products	(a) Chilling of carcasses	<p><b>Brainstorm:</b></p> <p>Guide the students to define chilling, carcass</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> </ul>	Carcass chilled at required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to chill meat /carcasses.</p>	This element can be achieved at a work place or training institution.	149

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>discussion:</b>  Organize the students in manageable groups to prepare cold rooms, freezer and carcass  <b>Practical work:</b>  Guide the students to chill carcass	<ul style="list-style-type: none"> <li>• Identify and prepare carcasses</li> <li>• Pack meat /carcass into the chiller</li> <li>• Monitor Chilling carcasses</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<b>Principles:</b> The students should explain the principle to chilling and refrigeration  <b>Theories:</b> The student should explain:- <ul style="list-style-type: none"> <li>• Importance of chilling meat</li> <li>• Signs of spoilage for stored meat</li> <li>• Importance of determining chiller loss of carcass</li> </ul> <b>Circumstantial knowledge Detailed knowledge about:</b> Knowledge on microbiology	The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Mask</li> <li>• Thermometer</li> <li>• Freezer and cold rooms</li> <li>• Carrying vessels</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Heavy duty jacket</li> <li>• White coat</li> <li>• White trousers</li> <li>• Cap or helmet</li> <li>• Plastic apron</li> </ul>	
		(b) Freezing of carcasses	<b>Brainstorm:</b>  Guide the students to define freezing  <b>Discussion:</b>  Organize the students in manageable groups on how to prepared freezers, and carcass	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare carcasses</li> <li>• Pack carcasses into a freezer</li> <li>• Run and set temperature of freezer</li> <li>• Monitor temperature</li> <li>• Observe health and safety precautions</li> </ul>	Carcass frozen at required standards	<b>Knowledge evidence: Detailed knowledge of: Method used:</b> The students should explain how to freeze meat and meat products  <b>Principles:</b> The students should explain the principle related freezing and refrigeration  <b>Theories:</b> The student should explain:-	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Mask</li> <li>• Thermometer</li> <li>• Freezer and cold rooms</li> <li>• Carrying vessels</li> <li>• Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b>  Guide the students to freeze carcass	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace</li> <li>• Pack meat cuts</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Importance of maintaining cold chain</li> <li>• Freezing temperatures in meat business</li> <li>• Signs of spoilage in stored meat</li> <li>• Freezer carcass weight loss</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Knowledge on microbiology	<ul style="list-style-type: none"> <li>• Heavy duty gloves</li> <li>• Heavy duty jacket</li> <li>• White coat</li> <li>• White trousers</li> <li>• Cap or helmet</li> <li>• Plastic apron</li> </ul>	
		(c) Storing of cold meat and meat products	<b>Brainstorm:</b>  Guide the students to define storage  <b>Chiller visit:</b>  Organize the students in manageable groups to visit an abattoir and observe storage of meat.  <b>Practical work:</b>  Guide the students on how	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare carcasses/meat for storage</li> <li>• pack carcasses/meat in cold room</li> <li>• Monitor cold room temperature</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and store</li> </ul>	Storing of cold meat and meat products performed at required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to store / preserve meat and meat products  <b>Principles:</b> The students should explain the principle related to preservation / storage of meat and meat products  <b>Theories:</b> The student should explain:- <ul style="list-style-type: none"> <li>• Assess keeping quality of meat</li> <li>• Importance of maintaining cold chain</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Mask</li> <li>• Thermometer</li> <li>• Freezer and cold rooms</li> <li>• Carrying vessels</li> <li>• Gum boots</li> <li>• Heavy duty gloves</li> <li>• Heavy duty jacket</li> <li>• White coat</li> <li>• White trousers</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			to store cold meat and meat products	<ul style="list-style-type: none"> <li>•Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>•Signs of spoilage in stored meat</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Knowledge on microbiology</li> <li>•Meat aging process</li> </ul>	<ul style="list-style-type: none"> <li>•Cap or helmet</li> <li>•Plastic apron</li> </ul>	
		(d) Transporting meat and meat products	<p><b>Brainstorm:</b></p> <p>Guide the students to define meat van</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to prepare meat vans and other equipment used in transportation of meat.</p> <p><b>Practical work:</b></p> <p>Guide the students on how to transport meat and meat products</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and safety gear</li> <li>•Prepare or pack meat for transportation</li> <li>•Prepare meat van</li> <li>•Transport meat and meat products</li> <li>•Observe health and safety precautions</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Transporting of meat and meat products performed as per the required standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to transport meat and meat products</p> <p><b>Principles:</b> The students should explain the principle of:</p> <ul style="list-style-type: none"> <li>•Transportation of meat and meat products</li> </ul> <p><b>Theories:</b> The student should explain:-</p> <ul style="list-style-type: none"> <li>•Importance of maintaining cold chain</li> <li>•Prerequisites for meat van</li> <li>•Signs of spoilage in stored meat</li> <li>•Packing of meat</li> </ul> <p><b>Circumstantial knowledge Detailed knowledge about:</b></p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Mask</li> <li>•Thermometer</li> <li>•Freezer and cold rooms</li> <li>•Carrying vessels</li> <li>•Gum boots</li> <li>•Heavy duty gloves</li> <li>•Heavy duty jacket</li> <li>•White coat</li> <li>•White trousers</li> <li>•Cap or helmet</li> <li>•Plastic apron</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						Knowledge on microbiology		
2.0 Producing meat cutlets and meat products	2.1 Making meat cuts	(a) Producing beef cuts	<p><b>Brainstorm:</b></p> <p>Guide the students to define beef cuts</p> <p><b>Visit meat shop:</b></p> <p>Organize the students in manageable groups to visit a nearby meat processing and practice preparation of beef meat cuts</p> <p><b>Practical work:</b></p> <p>Guide the students to produce beef cuts</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Produce beef cutlets</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>	Beef cuts prepared to the required standards.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to prepare beef cuts</p> <p><b>Principles:</b> The students should explain the principles of making beef cuts.</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of beef cuts in retails</li> <li>• Steps involved in production of beef cuts</li> <li>• Essence of special beef cutting</li> <li>• Specifying beef cuts to their marketing values</li> <li>• Culinary uses of beef cuts</li> <li>• Uses of trimmings</li> <li>• Handling of beef cuts</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Band saw</li> <li>• Weighing scale</li> <li>• De-boning knives</li> <li>• Hand saw</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron gloves</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	223

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>• Important components of meat</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Cuts demanded versus production</li> <li>• Losses due to cutting and deboning process</li> <li>• Safe handling of tools and equipment</li> </ul>		
		(b) Producing lamb/goat cuts	<p><b>Brainstorm:</b></p> <p>Guide the students to define lamb/chevon cuts</p> <p><b>Practical work:</b></p> <p>Guide the students on how to produce lamb cuts</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare chevon and lamb carcasses</li> <li>• Produce chevon lamb cutlets</li> <li>• Observe health and safety precautions</li> </ul>	Lamb /chevon prepared as per the required market standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to produce lamb / chevon cuts</p> <p><b>Principles:</b> The students should explain the principles of making lamb /chevon cuts.</p> <p><b>Theories:</b> The students should explain:-</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Band saw</li> <li>• Weighing scale</li> <li>• De-boning knives</li> <li>• Hand saw</li> <li>• Steel sharpener</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Importance of making lamb /chevon cuts</li> <li>• Steps involved in production of lamb /chevon cuts</li> <li>• Traditional lamb cutting</li> <li>• Culinary uses of lamb cuts</li> <li>• Uses of trimmings</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Cuts demanded versus production</li> <li>• Losses due to cutting and deboning process</li> <li>• Safe handling of tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Dust bins</li> <li>• Iron gloves</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(c) Producing pig cuts	<p><b>Brainstorm:</b></p> <p>Guide the students to identify traditional pig cuts</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to visit a</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare pig carcasses</li> <li>• De bone pig to produce cutlets</li> <li>• Trim pig cuts</li> </ul>	Pigs prepared as per the required market standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare pigs cuts</p> <p><b>Principles:</b> The students should explain the principles related to preparation of pig cuts.</p> <p><b>Theories:</b> The students should explain:-</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Band saw</li> <li>• Weighing scale</li> <li>• De-boning knives</li> <li>• Hand saw</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<p>pig processing facility to observe different types of cuts and meat products</p> <p><b>Demonstration:</b></p> <p>Demonstrate how to make pig cuts</p> <p><b>Practical work:</b></p> <p>Guide the students to produce pigs cuts</p>	<ul style="list-style-type: none"> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Importance of pigs cuts in retails</li> <li>• Steps involved in production of pigs cuts</li> <li>• Essence of special pigs cutting</li> <li>• Specifying pigs cuts to their marketing values</li> <li>• Culinary uses of pigs cuts</li> <li>• Handling of pigs cutlets</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Cuts demanded versus production</li> <li>• Losses due to cutting and deboning process</li> </ul>	<ul style="list-style-type: none"> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron gloves</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
		(d) Producing poultry cuts	<p><b>Brainstorm:</b></p> <p>Guide the students to identify different types of poultry meat</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to visit a poultry processing facility to observe different types of cuts and meat products</p> <p><b>Demonstration:</b></p> <p>Demonstrate how to make poultry cuts</p> <p><b>Practical work:</b></p> <p>Guide the students on how to produce poultry cuts</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare poultry carcasses</li> <li>• Produce poultry cutlets</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>	Poultry cuts prepared as per the required standards.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to produce poultry cuts</p> <p><b>Principles:</b> The students should explain the principles related to production of poultry cuts</p> <p><b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Importance of poultry cuts in retails</li> <li>• Steps involved in production of poultry cuts</li> <li>• Essence of special poultry cuts</li> <li>• Specifying poultry cuts to their marketing values</li> <li>• Culinary uses of poultry cuts</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Band saw</li> <li>• Weighing scale</li> <li>• De-boning knives</li> <li>• Hand saw</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron gloves</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	

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				Process Assessment	Services Assessment	Knowledge Assessment		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Cuts demanded versus production</li> <li>•Losses due to cutting and deboning process</li> </ul>		
		(e) Producing minced meat	<b>Brainstorm:</b> Guide the students to define minced meat  <b>Demonstration:</b> Demonstrate how to mince meat  <b>Practical work:</b> Guide the students on how to produce minced meat	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare working place</li> <li>•Organize work tools, equipment and safety gear</li> <li>•Prepare meat for mincing</li> <li>•Produce minced meat</li> <li>•Observe health and safety precautions</li> <li>•Clean tools, equipment and workplace.</li> <li>•Store tools and equipment</li> </ul>	Minced meat prepared as per the required market standards.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to mince meat  <b>Principles:</b> The students should explain the principles related to mincing meat.  <b>Theories:</b> The students should explain:- <ul style="list-style-type: none"> <li>•Importance of minced meat in retails</li> <li>•Steps involved in production of minced meat</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Band saw</li> <li>•Weighing scale</li> <li>•De-boning knives</li> <li>•Hand saw</li> <li>•Steel sharpener</li> <li>•Dust bins</li> <li>•Iron gloves</li> <li>•Iron apron</li> <li>•Clog shoes</li> <li>•White lab coat</li> <li>•White trouser</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
						<ul style="list-style-type: none"> <li>•Culinary uses of minced meat</li> <li>•Economies of minced meat</li> <li>•Handling of minced meat</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Minced meat demanded versus production	<ul style="list-style-type: none"> <li>•Cap</li> <li>•Mask</li> </ul>	
		(f) Making stock	<b>Brainstorm:</b> Guide the students to define meat stock  <b>Discussion:</b> Organize the students in manageable groups to prepare meat for making meat stock  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare working place</li> <li>•Organize work tools, equipment and safety gear</li> <li>•Prepare meat</li> <li>•Boil meat/bones</li> <li>•Separate meat/bones and soup</li> <li>•preserve stock</li> <li>•Observe health and safety precautions</li> </ul>	Meat stock prepared to the required standards.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to make stock. <b>Principles:</b> The students should explain the principles related to making meat stock.	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Band saw</li> <li>•Weighing scale</li> <li>•De-boning knives</li> <li>•Hand saw</li> <li>•Steel sharpener</li> <li>•Dust bins</li> <li>•Iron gloves</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students on how prepare meat stock	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<b>Theories:</b> The students should explain:- <ul style="list-style-type: none"> <li>• Importance of meat stock</li> <li>• Steps involved in preparation of meat stock</li> <li>• Culinary uses of meat stock</li> </ul> <b>Circumstantial knowledge Detailed knowledge about:</b> Meat stock demanded versus production	<ul style="list-style-type: none"> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
	2.2 Making sausages	(a) Producing Breakfast sausage	<b>Brainstorm:</b> Guide the students to define Breakfast sausage  <b>Discussion:</b> Organize the students in manageable groups to prepare meat for	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Identify different recipes of sausage</li> <li>• Mix the recipe</li> <li>• Chop / grind the sausage recipe</li> </ul>	Breakfast sausage prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to prepare breakfast sausage <b>Principles:</b> The students should explain the principle related to preparation of breakfast sausage. <b>Theories:</b> The students should explain:- <ul style="list-style-type: none"> <li>• Major types of breakfast sausages.</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Bowl chopper</li> <li>• Weighing scale</li> <li>• Ice making machine</li> </ul>	149

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				Process Assessment	Services Assessment	Knowledge Assessment		
			preparing breakfast sausage  <b>Demonstration:</b>  Demonstrate how to make breakfast sausage  <b>Practical work:</b>  Guide the students on how to prepare breakfast sausage	<ul style="list-style-type: none"> <li>• Pack sausage emulsion into casing</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Different ways of making beef sausages</li> <li>• Recipe ingredients for beef sausages.</li> <li>• Common ingredients used in breakfast sausage</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safe handling of sausage ingredients</li> <li>• Consumers awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Sausage filler</li> <li>• Cooking pot</li> <li>• Linking machine</li> <li>• Vacuum packer</li> <li>• Meat trays</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• Surgical gloves</li> <li>• White coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(b) Producing Vienna sausage	<b>Brainstorm:</b>  Guide the students to define Vienna sausage  <b>Demonstration:</b>  Demonstrate how to make vienna sausage  <b>Practical work:</b>  Guide the students to	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Identify ingredients for vienna sausage recipes</li> <li>• Mix the recipe</li> <li>• Chop / grind the sausage recipe</li> <li>• Pack sausage emulsion into casing</li> </ul>	Vienna sausage prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>  <b>Method used:</b> The students should explain how to make vienna sausage. <b>Principles:</b> The students should explain the principles related to preparation of vienna sausage <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Methods of making Vienna sausage</li> <li>• Recipes for Sausage</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Bowl chopper</li> <li>• Weighing scale</li> <li>• Ice making machine</li> <li>• Sausage filler</li> <li>• Smock box</li> <li>• Cooking pot</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			produce Vienna sausage	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Food colours and flavours used in making vienna sausage</li> <li>• Different types of sausage binders</li> <li>• Packing material</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Safe handling of sausage ingredients</li> <li>• Consumers awareness when dealing with non-consumable casing</li> </ul>	<ul style="list-style-type: none"> <li>• Linking machine</li> <li>• Vacuum packer</li> <li>• Meat trays</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• Surgical gloves</li> <li>• White coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(c) Producing liver pate sausage	<p><b>Brainstorm:</b></p> <p>Guide the students on how to define liver pate sausage</p> <p><b>Demonstration:</b></p> <p>Demonstrate how to make liver pate sausage</p> <p><b>Practical work:</b></p> <p>Guide the students to</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Identify ingredient for liver pate recipe</li> <li>• Chop liver pate recipe</li> <li>• Fill in liver pate emulsion into casing</li> </ul>	Liver pate sausage prepared as per the required market standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare liver pate sausage <b>Principles:</b> The students should explain the principle related to preparation of liver pate sausage <b>Theories:</b> The students should explain:-</p> <ul style="list-style-type: none"> <li>• Methods of making liver pate sausage</li> <li>• Ingredients for liver pate recipe</li> <li>• Use of trimmings in making liver pate</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Bowl chopper</li> <li>• Weighing scale</li> <li>• Ice making machine</li> <li>• Sausage filler</li> <li>• Smock box</li> <li>• Cooking pot</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			prepare liver pate sausage	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Food colours, flavours and binders used in making liver pate</li> <li>• Packaging materials for liver pate</li> </ul> <p><b>Circumstantial knowledge</b>  <b>Detailed knowledge about:</b>  Proper selection and preservation of liver.</p>	<ul style="list-style-type: none"> <li>• Linking machine</li> <li>• Vacuum packer</li> <li>• Meat trays</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Iron apron</li> <li>• Clog shoes</li> <li>• Surgical gloves</li> <li>• White coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(d) Producing Chicken sausage	<p><b>Brainstorm:</b></p> <p>Guide the students to define Chicken sausage</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to identify ingredients for making chicken sausage</p> <p><b>Demonstration:</b></p> <p>Demonstrate how to make chicken sausage</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare ingredients for chicken sausage recipe</li> <li>• Chop sausage recipe</li> <li>• Fill in chicken sausage emulsion into casing</li> <li>• Clean tools, equipment and workplace</li> </ul>	Chicken sausage from different species of animals produced to the required standards	<p><b>Knowledge evidence:</b>  <b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to :</p> <ul style="list-style-type: none"> <li>• Follow steps in Chicken sausage making</li> <li>• Link sausage pieces</li> </ul> <p><b>Principles:</b> The students should explain the principle of:</p> <ul style="list-style-type: none"> <li>• Producing Chicken sausage</li> <li>• Producing cooked sausage</li> <li>• Operating bowl chopper</li> </ul> <p><b>Theories:</b> The students should explain:-</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Bowl chopper</li> <li>• Weighing scale</li> <li>• Ice making machine</li> <li>• Sausage filler</li> <li>• Smock box</li> <li>• Cooking pot</li> <li>• Linking machine</li> <li>• Vacuum packer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b>  Guide the students to produce Chicken sausage	<ul style="list-style-type: none"> <li>•Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>•Different ways of making Chicken sausage</li> <li>•Recipe ingredients for Chicken sausage</li> <li>•Economical uses of trimmings in Chicken sausage making</li> <li>•Important food colours and flavours used in food industry</li> <li>•Different types of sausage binders</li> <li>•Packing material</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Consumers awareness when dealing with non-consumable casing</li> </ul>	<ul style="list-style-type: none"> <li>•Meat trays</li> <li>•Knives</li> <li>•Steel sharpener</li> <li>•Dust bins</li> <li>•Iron apron</li> <li>•Clog shoes</li> <li>•Surgical gloves</li> <li>•White coat</li> <li>•White trouser</li> <li>•Cap</li> <li>•Mask</li> </ul>	
	2.3 Making other meat products	(a) Producing salami	<b>Brainstorm:</b>  Guide the students to define salami  <b>Discussion:</b>  Organize the students in manageable groups to identify materials for making salami	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare working place</li> <li>•Organize work tools, equipment and safety gear</li> <li>•Prepare ingredients</li> <li>•Grind meat and fat.</li> <li>•Mix minced meat and fat with spices</li> <li>•Add starter</li> </ul>	Salami prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare salami <b>Principles:</b> The students should explain the principles related to salami making. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Steps involved in production of salami</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Mincing machine</li> <li>•Brine injector</li> <li>•Meat mixer</li> <li>•Bowl chopper</li> </ul>	186

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Demonstration:</b> Demonstrate how to make salami  <b>Practical work:</b> Guide the students to produce salami	<ul style="list-style-type: none"> <li>• Soak casing in hot water and fill the sausage</li> <li>• Ferment salami</li> <li>• Dry the salami</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment.</li> </ul>		<ul style="list-style-type: none"> <li>• Economic importance of salami in meat business</li> <li>• Fermentation process</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> safety precautions during preparation of salami	<ul style="list-style-type: none"> <li>• Meat mould</li> <li>• Patty machine</li> <li>• Chilling room</li> <li>• Working table</li> <li>• Vacuum packer</li> <li>• Weighing scale</li> <li>• Smock box</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(b) Producing biltong	<b>Brainstorm:</b> Guide the students to define biltong  <b>Discussion:</b> Organize the students in manageable groups to identify materials for making biltong.  <b>Demonstration:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare ingredients</li> <li>• Identify cut and prepare meat strings</li> <li>• Mix meat strings with ingredients</li> <li>• Chill the strings</li> </ul>	Biltong prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to make biltong <b>Principles:</b> The students should explain the principles involved in making biltong <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Steps involved in making of biltong</li> <li>• Economies of biltong</li> <li>• Preparation of biltong strings</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Brine injector</li> <li>• Meat mixer</li> <li>• Bowl chopper</li> <li>• Meat mould</li> <li>• Patty machine</li> <li>• Smoke generator</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Demonstrate how to make biltong.  <b>Practical work:</b>  Guide the students on how to produce biltong	<ul style="list-style-type: none"> <li>• Perform air drying of marinated meat strings</li> <li>• Pack biltong</li> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment.</li> </ul>		<ul style="list-style-type: none"> <li>• Methods of making biltong</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> safety precautions in all processes of making biltong.	<ul style="list-style-type: none"> <li>• Chilling room</li> <li>• Working table</li> <li>• Vacuum packer</li> <li>• Weighing scale</li> <li>• Smock box</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(c) Producing ham	<b>Brainstorm:</b>  Guide the students to define ham  <b>Discussion:</b>  Organize the students in manageable groups to identify materials for making ham  <b>Demonstration:</b>  Demonstrate how to make ham	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Prepare ham ingredients</li> <li>• Prepare cuts for ham making</li> <li>• Mix /brine with curing mixture</li> <li>• Cure the brined cut</li> <li>• Chill the brined cut</li> <li>• Dry the brined chilled cut</li> </ul>	Ham prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to make ham. <b>Principles:</b> The students should explain the principles related to ham production. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Steps involved in production of ham</li> <li>• Economic importance of ham in meat business</li> <li>• Suitable cuts for making ham</li> </ul> <b>Circumstantial knowledge</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Brine injector</li> <li>• Meat mixer</li> <li>• Bowl chopper</li> <li>• Meat mould</li> <li>• Patty machine</li> <li>• Smoke generator</li> <li>• Chilling room</li> <li>• Working table</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			<b>Practical work:</b>  Guide the students to produce ham	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment.</li> </ul>		<b>Detailed knowledge about</b> safety precautions during preparation of ham	<ul style="list-style-type: none"> <li>• Vacuum packer</li> <li>• Weighing scale</li> <li>• Smock box</li> <li>• Knives</li> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	
		(d) Producing bacon	<b>Brainstorm:</b>  Guide the students to define bacon  <b>Demonstration:</b>  Demonstrate how to make bacon  <b>Practical work:</b>  Guide the students to produce bacon	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Prepare working place</li> <li>• Organize work tools, equipment and safety gear</li> <li>• Select and slice pork cut for bacon</li> <li>• Prepare spices for bacon</li> <li>• Cure or mix bacon with spices and salt</li> <li>• Smoke the spiced cut</li> <li>• Pack bacon</li> <li>• Clean tools, equipment and workplace.</li> </ul>	Bacon prepared as per the required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare bacon <b>•Principles:</b> The students should explain the principles related to bacon making. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Steps involved in production of bacon</li> <li>• Economic importance of bacon in meat business</li> <li>• Suitable cut for bacon making.</li> </ul> <b>Circumstantial knowledge</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Mincing machine</li> <li>• Brine injector</li> <li>• Meat mixer</li> <li>• Bowl chopper</li> <li>• Meat mould</li> <li>• Patty machine</li> <li>• Smoke generator</li> <li>• Chilling room</li> <li>• Working table</li> <li>• Vacuum packer</li> <li>• Weighing scale</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
				<ul style="list-style-type: none"> <li>•Store tools and equipment.</li> </ul>		<b>Detailed knowledge about</b> Safety precautions during bacon preparation	<ul style="list-style-type: none"> <li>•Smock box</li> <li>•Knives</li> <li>•Steel sharpener</li> <li>•Dust bins</li> <li>•Clog shoes</li> <li>•White lab coat</li> <li>•White trouser</li> <li>•Cap</li> <li>•Mask</li> </ul>	
		(e) Producing meat patties	<b>Brainstorm:</b> Guide the students on how to define meat patties  <b>Discussion:</b> Organize the students in manageable groups to prepare meat for making meat patties  <b>Demonstration:</b> Demonstrate how to make meat patties  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare working place</li> <li>•Organize work tools, equipment and safety gear</li> <li>•Select and grind meat cut</li> <li>•Mix minced meat with seasonings and salt</li> <li>•Portion the mixture into portions of similar size</li> <li>•Shape the portions</li> <li>•Chill the patties</li> <li>•Cook the patties</li> <li>•Make meat patties and meat loaf</li> </ul>	Meat patties prepared as per required market standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare meat patties <b>Principles:</b> The students should explain principles related to preparation of meat patties <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Steps involved in production of meat patties</li> <li>•Economies of meat patties</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about</b> safety precautions in all steps involved in making meat patties	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>•Mincing machine</li> <li>•Brine injector</li> <li>•Meat mixer</li> <li>•Bowl chopper</li> <li>•Meat mould</li> <li>•Patty machine</li> <li>•Smoke generator</li> <li>•Chilling room</li> <li>•Working table</li> <li>•Vacuum packer</li> <li>•Weighing scale</li> <li>•Smock box</li> <li>•Knives</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Services Assessment	Knowledge Assessment		
			Guide the students to produce meat patties	<ul style="list-style-type: none"> <li>• Clean tools, equipment and workplace.</li> <li>• Store tools and equipment</li> </ul>			<ul style="list-style-type: none"> <li>• Steel sharpener</li> <li>• Dust bins</li> <li>• Clog shoes</li> <li>• White lab coat</li> <li>• White trouser</li> <li>• Cap</li> <li>• Mask</li> </ul>	

## Form Four

**Table 6: Detailed Contents for Form Four**

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
1.0 Fattening slaughter stock	1.1 Planning layout of feedlot facility	(a) Selecting site for feedlot	<p><b>Brainstorm:</b></p> <p>Guide the students to define feedlot</p> <p><b>Site visit:</b></p> <p>Organize the students in manageable groups to identify different sites that can be used to set up a feedlot</p> <p><b>Practical work:</b></p> <p>Guide the students to select site for feedlot</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Checking carrying capacity of the area</li> <li>•Check climate</li> <li>•Proximity of the selected area</li> <li>•Accessibility of the area</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Suitable area selected for establishment of feedlot	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to select a site for feedlot establishment</p> <p><b>Principles:</b> The students should explain the principles involved in selecting site for feedlot establishment</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Factors to consider in site selection</li> <li>•Requirements in establishing a feedlot</li> <li>•Suitable climate for animals</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <p>Environmental issues in relation to feedlot site</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Record book</li> <li>•Bush knife</li> <li>•Hand hoe</li> <li>•Building rope</li> </ul>	67

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		(b) Determining capacity of the feedlot	<b>Brainstorm:</b> Guide the students to define carrying capacity  <b>Site visit:</b> Organize the students in manageable groups to measure the area in square meter, to do some calculations  <b>Practical work:</b> Guide the students to determining capacity of the feedlot	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Select suitable area for feedlot</li> <li>•Identify animal species and breeds</li> <li>•Identify vegetation type</li> <li>•Source and types of supplementary feeds</li> <li>•Calculate the carrying capacity</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Carrying capacity of feedlot determined according to the required set standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine carrying capacity of a feedlot <b>Principles:</b> The students should explain the principles of determining the capacity of feedlot <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Important points to consider in determining capacity of the feedlot</li> <li>•Types of supplementary feed used</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Environmental issues.</li> <li>•Rules and regulation related feedlots</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>•Record book</li> <li>•Bush knife</li> <li>•Hand hoe</li> <li>•Tape measure</li> <li>•Building rope</li> <li>•Calculator</li> <li>•Ruler</li> <li>•Helmet</li> <li>•Gum boots</li> <li>•Overall</li> </ul>	
		(c) Sketching simple drawings	<b>Brainstorm:</b> Guide the students to determine carrying capacity of the feedlot	<b>The students should be able to:</b>	Simple drawings for feedlot	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b>	This element can be achieved at a work	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		for feedlot	<p>Guide the students to identify basic sections of feedlot</p> <p><b>Site visit:</b></p> <p>Organize the students in manageable groups to visit a nearby feedlot to observe major sections of feedlot</p> <p><b>Practical work:</b></p> <p>Guide the students to Sketching simple drawings for feedlot</p>	<ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Select suitable area for feedlot</li> <li>•Plan lay out of pens</li> <li>•Plan pathways and roads</li> <li>•Plan for handling facilities and fence</li> <li>•Plan for future expansion</li> <li>•Sketch feedlot facilities</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	<p>Sketched according to the set standards</p>	<p><b>Method used:</b> The students should explain how to sketch a simple drawings of feedlot</p> <p><b>Principles:</b> The students should explain the principles of sketching simple drawings for feedlot</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Requirements in Sketching simple drawings for feedlot</li> <li>•Basic components of a feedlot</li> <li>•Space of pens in relation intended number of animals</li> </ul>	<p>place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Drawing table</li> <li>•Drawing set</li> <li>•Record book</li> <li>•Ruler</li> <li>•Tape measure</li> <li>•Set of square</li> <li>•Calculator</li> <li>•Helmet</li> <li>•Gum boots</li> <li>•Overall</li> </ul>	
		(d) Laying out Feedlot facility	<p><b>Brainstorm:</b></p> <p>Guide the students to explain and differentiate</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> </ul>	<p>Feedlot lay our set according to the required standards</p>	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to make lay out of a feed lot.</p>	<p>This element can be achieved at a work place or training institution.</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			between a ranch and feed lot.  <b>Practical work:</b>  Guide the students on how to make a laying out of feedlot facility	<ul style="list-style-type: none"> <li>• Select suitable area for feedlot</li> <li>• Identify nearest source of water</li> <li>• Check wind direction</li> <li>• Identify area for feed storage</li> <li>• Sketch feedlot facilities</li> <li>• Identify slope to enable efficient drainage</li> <li>• Layout feedlot facility</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<b>Principles:</b> The students should explain the principles of related to planning and lay out of a feed lot facility  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Requirements for making feedlot lay out.</li> <li>• Essential structures required in feedlot</li> <li>• Recommended size of pens</li> <li>• Accessibility to the feedlot</li> <li>• Location of quarantine area.</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Environmental issues in relation to feedlot	The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Record book</li> <li>• Bush knife</li> <li>• Hand hoe</li> <li>• Tape measure</li> <li>• Trowel</li> <li>• Wooden trowel</li> <li>• Wheelbarrow</li> <li>• Spade</li> <li>• Building rope</li> <li>• Tin cutter</li> <li>• Set of hammers</li> <li>• Set of square</li> <li>• Fence stretcher</li> <li>• Helmet</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
	1.2 Managing feedlot	(a) Selecting animals for fattening	<b>Brainstorm:</b>  Guide the students to identify and explain criteria used in	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> </ul>	Selected fattening animals meets the required minimum standard criteria	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to select animals for fattening <b>Principles:</b> The students should explain the	This element can be achieved at a work place or training institution.  The following tools, equipment and safety	100

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<p>selecting animals for fattening</p> <p><b>Farm visit:</b></p> <p>Organize the students in manageable groups to visit a livestock market and observe selection of animals for fattening</p> <p><b>Practical work:</b></p> <p>Guide the students on how to select animals for fattening</p>	<ul style="list-style-type: none"> <li>• Identify market demand</li> <li>• Identify specie, breed and age for fattening</li> <li>• Determine weight</li> <li>• Check body conformation</li> <li>• Check health status</li> <li>• Weigh animals</li> <li>• Estimate age of animals</li> <li>• Keep farm records</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<p>principles related to selection of fattening animals</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Importance of selecting fattening animals</li> <li>• Essence of identifying species, breed and weight in selecting fattening animals</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal Welfare Act and its Regulations</li> <li>• Compliance with regulatory authorities</li> </ul>	<p>gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Calculator</li> <li>• Burdizzo</li> <li>• Record book</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
		(b) Organizing feed staff	<b>Brainstorm:</b>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment,</li> </ul>	Feed staff ingredients organized according to	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain</p>	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		ingredients	<p>Guide the students to define feed.</p> <p><b>Feedlot visit:</b></p> <p>Organize the students in manageable groups to visit a nearby feedlot and observe types of feeds.</p> <p><b>Practical work:</b></p> <p>Guide the students to organize feed staff ingredients</p>	<p>utensils and safety gear</p> <ul style="list-style-type: none"> <li>• Identify growth rate and phases of fattening animals</li> <li>• Prepare feeding plan (starter, growth and finish)</li> <li>• Identify sources of ingredients</li> <li>• Keep farm records</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>	the required standard	<p>how to formulate feed staff ingredients</p> <p><b>Principles:</b> The students should explain the principles of organizing feed.</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Factor to consider in organizing animal feeds</li> <li>• Characteristics of each feed staff</li> <li>• Limiting factors in organizing feed staff</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal Welfare Act and its Regulations</li> <li>• Availability and costs of animal feeds</li> </ul>	<p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Feed standard table</li> <li>• Different feed staff</li> <li>• Record book</li> <li>• Bush knife</li> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
		(c) Formulating feeds	<p><b>Brainstorm:</b></p> <p>Guide the students to define protein, energy, fat, vitamins and minerals</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> </ul>	Animals feeds formulated according to the required standard	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to formulate animal feeds.</p> <p><b>Principles:</b> The students should explain the</p>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Feedlot visit:</b>  Organize the students in manageable groups to identify and collect or purchase different sources animal feed  <b>Demonstration</b>  Demonstrate to students on how to formulate livestock feeds  <b>Practical work:</b>  Guide the students to formulating feeds	<ul style="list-style-type: none"> <li>• Identify available sources of major feed ingredient</li> <li>• Identify recommended ratios</li> <li>• Weigh food ingredients according to the recommended ratios</li> <li>• Compound feed</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		principles of feed formulation. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Major animal feed components</li> <li>• Importance of animal nutrition</li> <li>• Sources of major components of animal feed</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Animal Welfare Act and its Regulations</li> <li>• Basic knowledge on mathematics.</li> </ul>	<ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Calculator</li> <li>• Feed standard table</li> <li>• Different feed staff</li> <li>• Spade</li> <li>• Record book</li> <li>• Bush knife</li> <li>• Wheelbarrow</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
		(d) Feeding animals for fattening	<b>Brainstorm:</b>  Guide the students to define feed	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment,</li> </ul>	Animals for fattening fed according to the required standard	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			ingredients and feeding regime  <b>Demonstration</b>  Demonstrate to students on how to feed livestock  <b>Practical work:</b>  Guide the students to feed animals for fattening	utensils and safety gear • Identify age and weight of feedlot animals • Monitor weight gaining • Identify basic nutritional requirements • Determine feeding ratios • Determine feeding regime • Keep farm records • Observe health and safety precautions • Clean tools, equipment and workplace • Store tools and equipment		how to different species of animals in a feedlot <b>Principles:</b> The students should explain the principles feeding fattening animals <b>Theories:</b> The students should explain: • Importance of fattening animals • Types of feed used for fattening animals • Importance of supplementary feed to fattening animals • Factors affecting performance of animals in feedlot <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Proper storage of different types of animal feeds	The following tools, equipment and safety gear are to be available:-  • Weigh instruments • Calculator • Feed standard table • Record book • Wheelbarrow • Gum boots • Overall	
		(e) Control parasites	<b>Brainstorm:</b>  Guide the students to define parasite, internal and	<b>The students should be able to:</b> • Organize work tools, equipment, utensils and safety gear • De-worm feedlot animals	Parasites controlled according to the recommended procedures	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to control parasites <b>Principles:</b> The students should explain the	This element can be achieved at a work place or training institution.  The following tools, equipment and safety	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<p>external parasites.</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to identify common livestock parasite and their economic effects to meat trade.</p> <p><b>Practical work:</b></p> <p>Guide the students to deworm spray acaricide to animals</p>	<ul style="list-style-type: none"> <li>• Spray feedlot animals</li> <li>• Treat incoming animals</li> <li>• Practice rotational grazing</li> <li>• Practice biosecurity measures</li> <li>• Keep farm records</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<p>principles of related to control of parasites</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• How to deworm animals</li> <li>• To vaccinate animals</li> <li>• To spray animals</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Animal Welfare Act and its Regulations</li> <li>• Drug withdrawal period</li> </ul>	<p>gear are to be available:-</p> <ul style="list-style-type: none"> <li>• Hand spray pump</li> <li>• Drenching gun</li> <li>• Record book</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
		(f) Keeping records	<p><b>Brainstorm:</b></p> <p>Guide the students to</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> </ul>	Farm records are well kept according to the required standard	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The students should explain how to keep records</p>	This element can be achieved at a work place or training institution.	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			define record and data  <b>Group discussion:</b>  Organize the students in manageable groups to identify different types of record kept by their school.  <b>Practical work:</b>  Guide the students to keep records	<ul style="list-style-type: none"> <li>• Keep different farm records</li> <li>• Observe health and safety precautions</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<b>Principles:</b> The students should explain the principles maintaining farm records  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of keeping records</li> <li>• Types of different farm records</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Animal Welfare Act and its Regulations</li> <li>• Safe handling of tools and equipment</li> </ul>	The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Calculator</li> <li>• Feed standard table</li> <li>• Different feed staff</li> <li>• Drenching gun</li> <li>• Record book</li> <li>• Gum boots</li> <li>• Overall</li> </ul>	
2.0 Marketing meat and meat products	2.1 Controlling quality of meat and meat products	(a) Evaluating quality of meat products	<b>Brainstorm:</b>  Guide the students to define meat products  <b>Group discussion:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Perform visual inspection</li> <li>• Perform sensory taste (odour, flavour and touching)</li> </ul>	Quality of meat evaluated according to the set standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine the quality of meat and meat products.  <b>Principles:</b> The students should explain the principles of determining	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>• Weigh instruments</li> </ul>	63

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Organize the students in manageable groups to identify different meat products  <b>Practical work:</b>  Guide the students on how to evaluating quality of meat products	<ul style="list-style-type: none"> <li>• Evaluate fat and lean proportion</li> <li>• Check juiciness and dryness)</li> <li>• Perform microbiological test</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		quality of meat and meat products <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of meat quality control</li> <li>• Different quality dimensions in meat</li> <li>• Factors which can reduce meat quality.</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat inspection</li> <li>• Food quality regulations</li> <li>• Colour and smell in assessing meat quality.</li> </ul>	<ul style="list-style-type: none"> <li>• Thermometer</li> <li>• pH Meter</li> <li>• Record book</li> <li>• White coat</li> <li>• Gum boots</li> </ul>	
		(b) Evaluating quality of meat cuts	<b>Brainstorm:</b>  Guide the students to define meat cuts  <b>Group discussion:</b>  Organize the students in manageable	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Perform visual inspection</li> <li>• Perform sensory taste (odour, flavour and touching)</li> </ul>	Quality of meat cuts evaluated according to the set standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to: <ul style="list-style-type: none"> <li>• Factors to consider when determining the quality of meat cuts.</li> <li>• Causatives of deterioration of meat quality</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Thermometer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			groups to identify different meat cuts  <b>Practical work:</b>  Guide the students to evaluating quality of meat cuts	<ul style="list-style-type: none"> <li>•Evaluate fat and lean proportion</li> <li>•Check juiciness and dryness)</li> <li>•Perform cooking test</li> <li>•Perform storage and aging test.</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>		<p><b>Principles:</b> The students should explain the principles of determining quality of meat cuts</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Importance of meat cuts quality control</li> <li>•Different quality dimensions in meat cuts</li> <li>•Factors which can reduce meat cuts quality.</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Meat inspection</li> <li>•Food quality regulations</li> <li>•Colour and smell in assessing meat quality.</li> </ul>	<ul style="list-style-type: none"> <li>•PH Meter</li> <li>•Record book</li> <li>•White coat</li> <li>•Gum boots</li> </ul>	
		(c) Evaluating quality of edible offal	<b>Brainstorm:</b>  Guide the students to define edible, offal, green offal, red offal and pluck	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Perform visual evaluation</li> <li>•Perform chemical test</li> </ul>	Quality of edible offal evaluated according to the set standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to evaluate quality of edible offal</p> <p><b>Principles:</b> The students should explain the principles of determining quality of edible offal</p>	<p>This element can be achieved at a workplace or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Weighing instruments</li> <li>•Thermometer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Group discussion:</b>  Organize the students in manageable groups to identify different edible offal state factors which can cause deterioration of edible offal  <b>Practical work:</b>  Guide the students on how to evaluating quality of edible offal	<ul style="list-style-type: none"> <li>• Asses storage and shelf life</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		<b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of meat quality control</li> <li>• Different quality dimensions in edible offal</li> <li>• Factors which can reduce edible offal quality</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat inspection</li> <li>• Food quality regulations</li> <li>• Colour and smell in assessing meat quality</li> </ul>	<ul style="list-style-type: none"> <li>• Ph Meter</li> <li>• Record book</li> <li>• White coat</li> <li>• Gum boots</li> </ul>	
		(d) Evaluating quality of hides and skins	<b>Brainstorm:</b>  Guide the students to define hide, skin and skin defects	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Perform visual inspection</li> </ul>	Quality of hides and skin evaluated according to the set standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to assess quality of hides and skins  <b>Principles:</b> The students should explain the	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Discussion:</b> Organize the students in manageable groups to identify different hides and skins  <b>Practical work:</b> Guide the students to evaluating quality of hides and skin	<ul style="list-style-type: none"> <li>• Asses size and thickness</li> <li>• Asses flexibility and texture</li> <li>• Evaluate quality of preservation</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		principles of determining quality of hides and skin <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Importance of hide quality control</li> <li>• Different quality dimensions in hide and skin</li> <li>• Factors which can reduce hides and skin quality</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Meat inspection</li> <li>• Food quality regulations</li> <li>• Colour and smell in assessing meat quality.</li> </ul>	<ul style="list-style-type: none"> <li>• Weigh instruments</li> <li>• Thermometer</li> <li>• Ph Meter</li> <li>• Record book</li> <li>• White coat</li> <li>• Gum boots</li> </ul>	
	2.2 Packing of meat and meat products	(a) Designing of packaging and labelling	<b>Brainstorm:</b> Guide the students to define packing meat  <b>Discussion:</b> Organize the students in manageable	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> <li>• Prepare packing and labelling material</li> <li>• Identify vacuum packing materials</li> </ul>	Meat packing and labelling are well designed according to standards	<b>Knowledge evidence:</b> <b>Detailed knowledge about:</b> <b>Method used:</b> The students should explain how to design packaging materials and labels  <b>Principles:</b> The students should explain the principles of designing	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Camera</li> </ul>	77

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			groups to identify packaging materials, and labels required  <b>Practical work:</b>  Guide the students to designing of packaging and labelling	<ul style="list-style-type: none"> <li>• Identify wrapping meat and meat products</li> <li>• Identify heat sealing materials</li> <li>• Label meat and meat products</li> <li>• Keep records</li> <li>• Clean tools, equipment and workplace</li> <li>• Store tools and equipment</li> </ul>		packaging and labelling materials <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Points of consideration in designing packing materials and labels.</li> <li>• Details required for meat and meat product labelling materials</li> <li>• Types of labelling materials</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Packaging methods and shelf life.</li> <li>• Artwork</li> <li>• Food quality legislations</li> <li>• Safety precautions in handling tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Weighing instrument</li> <li>• Printer</li> <li>• Packaging machines</li> <li>• Flash disk</li> <li>• Record book</li> <li>• White coat</li> <li>• Gum boots</li> </ul>	
		(b) Packing meat and meat products	<b>Brainstorm:</b>  Guide the students to define packing meat  <b>discussion:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize work tools, equipment, utensils and safety gear</li> </ul>	Meat and meat products packed according to standards	<b>Knowledge evidence:</b> <b>Detailed knowledge about:</b> <b>Method used:</b> The students should explain how to pack meat by using different packaging materials:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<p>Organize the students in manageable groups to visit and identify different packaging of meat and meat products</p> <p><b>Demonstration</b></p> <p>Demonstrate to students on how to pack meat and meat products</p> <p><b>Practical work:</b></p> <p>Guide the students on how to pack meat and meat products by using different materials</p>	<ul style="list-style-type: none"> <li>• Perform vacuum packing meat and meat products</li> <li>• Wrap meat and meat products</li> <li>• Perform heat sealing</li> <li>• Keep records</li> <li>• Clean tools, equipment, and workplace</li> <li>• Store tools and equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Importance of proper packaging meat</li> <li>• Determine quality of packaging materials</li> <li>• Promote meat and meat products through packaging</li> </ul> <p><b>Principles:</b> The students should explain the principles related to packaging of meat and meat products</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>• Points of consideration in packing meat</li> <li>• Packaging methods and shelf life.</li> <li>• Advantage of packing meat and meat products</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>• Artwork</li> <li>• Food quality legislations</li> <li>• Safety precautions in handling tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Computer set</li> <li>• Camera</li> <li>• Weighing instrument</li> <li>• Printer</li> <li>• Packaging machines</li> <li>• Flash disk</li> <li>• Record book</li> <li>• White coat</li> <li>• Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		(c) Labelling of packed meat and meat products	<p><b>Brainstorm:</b></p> <p>Guide the students to define labelling, shelf- life, batch and expire date</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to visit a nearby supermarket and identify different types of labels.</p> <p><b>Demonstration</b></p> <p>Demonstrate to students on how to label meat and meat product</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment, utensils and safety gear</li> <li>•Label packed meat and meat products</li> <li>•Write necessary information on the label.</li> <li>•Keep records</li> <li>•Clean tools, equipment and workplace</li> <li>•Store tools and equipment</li> </ul>	Meat and meat products packed and labelled according to standards.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge about:</b></p> <p><b>Method used:</b> The students should explain how to label meat and meat products</p> <p><b>Principles:</b> The students should explain the principles related to labelling meat and meat products</p> <p><b>Theories:</b> The students should explain:</p> <ul style="list-style-type: none"> <li>•Points of consideration in labelling.</li> <li>•Advantage of labelling</li> <li>•Types of information to be included in labels</li> <li>•Recommended materials for making labels</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Packaging methods and shelf life.</li> <li>•Artwork</li> <li>•Food quality legislations</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Computer set</li> <li>•Camera</li> <li>•Printer</li> <li>•Flash disk</li> <li>•Record book</li> <li>•White coat</li> <li>•Gum boots</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Practical work:</b>  Guide the students on how to labelling packed meat and indicating necessary information on the labels					
	2.3 Pricing and costing meat and meat products	(a) Determining operational and production cost	<b>Brainstorm:</b>  Guide the students to define operational cost, production cost  <b>Discussion:</b>  Organize the students in manageable groups to identify operational cost	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize working materials, tools and equipment</li> <li>•Categorize cost components</li> <li>•Collect and record data</li> <li>•Allocate costs to products</li> <li>•Account for overheads</li> <li>•Determine unit costs</li> </ul>	Operational and production cost correctly determined	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine operational and production cost in a meat processing facility  <b>Principles:</b> The students should explain the principles of determining operational and production cost  <b>Theories:</b> The students should explain:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>•Personal computer/laptop</li> <li>•Printer</li> <li>•Calculator</li> <li>•Production records</li> <li>•Record book</li> </ul>	92

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			and production cost  <b>Practical work:</b>  Guide the students to determine operational and production cost	•Perform periodic review		<ul style="list-style-type: none"> <li>•Important points to consider in determining operational costs</li> <li>•List of activities in meat processing facility</li> <li>•Identify overhead costs</li> <li>•Determining unit cost</li> </ul> <b>Circumstantial knowledge</b> <ul style="list-style-type: none"> <li>•Detailed knowledge about:</li> <li>•Variation of prices in market</li> <li>•Market behaviour and preference of consumers</li> </ul>		
		(b) Conducting market survey	<b>Brainstorm:</b>  Guide the students to define market  <b>Discussion:</b>  Organize the students in manageable groups to identify market	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Organize working materials, tools and equipment</li> <li>•Identify and set your objectives</li> <li>•Identify Your Target Audience</li> <li>•Prepare the surveying tool</li> <li>•Choose the Survey Method</li> <li>•Collect data</li> </ul>	Market survey conducted as per instruction	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to conducting market survey <b>Principles:</b> The students should explain the principles of conducting market survey <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Need of conducting market survey</li> </ul>	. This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Personal computer/laptop</li> <li>•Printer</li> <li>•Calculator</li> <li>•Production records</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			price, and market cost of meat  <b>Practical work:</b>  Guide the students on how to conduct market survey	<ul style="list-style-type: none"> <li>Analyse and report</li> <li>Determine operational and production costs</li> <li>Conduct market survey</li> </ul>		<ul style="list-style-type: none"> <li>Methods of data collection</li> <li>Identification of target group.</li> </ul> <b>Circumstantial knowledge Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>Variation of prices in market</li> <li>Market behaviour and preference of consumers</li> </ul>	<ul style="list-style-type: none"> <li>Market survey report</li> <li>Record book</li> </ul>	
		(c) Setting price	<b>Brainstorm:</b>  Guide the students to define price  <b>Discussion:</b>  Organize the students in manageable groups to visit nearby meat shop and identify different meat prices	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>Organize working materials, tools and equipment</li> <li>Identify market demand and r competitors</li> <li>Identify target consumers</li> <li>Set pricing objectives</li> <li>Calculate meat selling price</li> </ul>	Price of meat and meat products set according to market survey conducted	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to set price of meat and meat products <b>Principles:</b> The students should explain the principles of setting price <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>Important points to consider in setting price</li> <li>Factors affecting price setting</li> <li>Forecast market of meat and meat products</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>Personal computer/laptop</li> <li>Printer</li> <li>Calculator</li> <li>Production records</li> <li>Market survey report</li> <li>Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Practical work:</b>  Guide the students on how to set price			<ul style="list-style-type: none"> <li>• Calculate price of meat and meat products</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Variation of prices in market</li> <li>• Market behaviour and preference of consumers</li> </ul>		
		(d) Determine breakeven point	<b>Brainstorm:</b>  Guide the students to define break even, gross profit margin, and profit  <b>discussion:</b>  Organize the students in manageable groups to calculate the break-even point  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize working materials, tools and equipment</li> <li>• Identify fixed costs, variable costs and unit selling price</li> <li>• Calculate breakeven point</li> <li>• Set meat and meat products price</li> </ul>	Break-even point of the business accurately determined	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine breakeven point <b>Principles:</b> The students should explain the principles of determining breakeven point <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Important points to consider in determining breakeven point,</li> <li>• Determine production cost of meat and meat products</li> <li>• Forecast market of meat and meat products</li> <li>• Set price of meat and meat products</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Personal computer/laptop</li> <li>• Printer</li> <li>• Calculator</li> <li>• Production records</li> <li>• Market survey report</li> <li>• Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Guide the students to determine break- even point			<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Variation of prices in market</li> <li>• Market behaviour and preference of consumers</li> </ul>		
		(e) Keep transaction records	<b>Brainstorm:</b> Guide the students to define transaction  <b>Discussion:</b> Organize the students in manageable groups to identify different financial records  <b>Practical work:</b> Guide the students to keep	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Organize working materials, tools, and equipment</li> <li>• Identify format or method</li> <li>• Establish record keeping system</li> <li>• Establish accounting system</li> <li>• Record transactions</li> <li>• Keep transaction records</li> </ul>	Transaction records well-kept	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to keep transaction records <b>Principles:</b> The students should explain the principles of keeping transaction records <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Important factors to consider in keeping transaction records</li> <li>• Advantage of keep transaction records/information</li> <li>• Methods of keeping transaction records</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Personal computer/laptop</li> <li>• Printer</li> <li>• Calculator</li> <li>• Production records</li> <li>• Market survey report</li> <li>• Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			transaction records			<ul style="list-style-type: none"> <li>•Variation of prices in market</li> <li>•Market behaviour and preference of consumers</li> </ul>		
	2.4 Trading meat and meat products	(a) Handling customers	<p><b>Brainstorm:</b></p> <p>Guide the students to define customer</p> <p><b>Group discussion:</b></p> <p>Organize the students in manageable groups to identify different customers of the meat products in the area</p> <p><b>Practical work:</b></p> <p>Guide the students on how to handle customers</p>	<p><b>The student should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and materials</li> <li>•Listen customers careful</li> <li>•Maintain positive tone</li> <li>•Provide solutions to problem</li> <li>•Be patient and empath</li> <li>•Identify and know your customers</li> <li>•Demonstrate proper handling of customers</li> <li>•Prepare orders as per customers' or market needs</li> </ul>	Customers handled according to the required set standards	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The student should explain how to handle customers</p> <p><b>Principles:</b> The student should explain the principles of handling customers</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•Importance of handling customers</li> <li>•Factors to consider in handling customers</li> <li>•Receiving and attending customer's order</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Consumer behaviour</li> <li>•Product shelf life specification</li> <li>•Promotion of products</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Cameras</li> <li>•Simple theatre room</li> <li>•Meat shop/butcher</li> <li>•Means of communication</li> <li>•Suggestion box</li> <li>•First aid kit</li> <li>•Receipt books</li> <li>•Weighing scale</li> <li>•Meat trays</li> <li>•Knives</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	92

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		(b) Displaying meat and meat products in shop	<p><b>Brainstorm:</b></p> <p>Guide the students to define displaying</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to identify fridge and freezer for displaying meat products</p> <p><b>Demonstration</b></p> <p>Demonstrate to students on how to display meat and meat products</p> <p><b>Practical work:</b></p> <p>Guide the students to</p>	<p><b>The student should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and materials</li> <li>•Identify different cuts and their names</li> <li>•Label meat and meat products</li> <li>•Arrange meat and meat products in an attractive manner</li> <li>•Lead customer's to identify your products</li> <li>•Give culinary uses of different meat cuts</li> <li>•Maintain cleanliness of display cabinet</li> </ul>	Meat and meat products well displayed in a display cabinet	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The student should explain how to handle customers</p> <p><b>Principles:</b> The student should explain the principles of handling customers</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•Factors to consider in displaying meat and meat products</li> <li>•Importance of displaying meat and meat products</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Consumer behavior</li> <li>•Product shelf life specification</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Meat shop/butcher</li> <li>•Receipt books</li> <li>•Weighing scale</li> <li>•Meat trays</li> <li>•Knives</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			displaying meat and meat products in shop					
		(c) Promoting meat and meat products	<p><b>Brainstorm:</b></p> <p>Guide the students to define promotion</p> <p><b>discussion:</b></p> <p>Organize the students in manageable groups to identify promotion ideas of the products</p> <p><b>Practical work:</b></p> <p>Guide the students to Promote meat and meat products</p>	<p><b>The student should be able to:</b></p> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and materials</li> <li>•Prepare orders as per customers or market needs</li> <li>•Conduct promotion campaign for meat and meat products</li> <li>•Establish business networks</li> <li>•Exhibit meat and meat products in trade fairs</li> <li>•Register business to relevant authorities</li> </ul>	Meat and meat products promoted according to the set standards.	<p><b>Knowledge evidence:</b></p> <p><b>Detailed knowledge of:</b></p> <p><b>Method used:</b> The student should explain how to promote meat and meat products business</p> <p><b>Principles:</b> The student should explain the principles related to promotion of meat and meat products business</p> <p><b>Theories:</b> The student should explain:</p> <ul style="list-style-type: none"> <li>•Importance of promoting business of meat and meat products</li> <li>•Relevance of managing sales transactions</li> <li>•Preparation of products for exhibition</li> </ul> <p><b>Circumstantial knowledge</b></p> <p><b>Detailed knowledge about:</b></p> <ul style="list-style-type: none"> <li>•Consciousness and costs involved to promotion of products</li> </ul>	<p>This element can be achieved at a work place or training institution.</p> <p>The following tools, equipment and safety gear are to be available:-</p> <ul style="list-style-type: none"> <li>•Meat shop/butcher</li> <li>•Cash register</li> <li>•Means of communication</li> <li>•Suggestion box</li> <li>•First aid kit</li> <li>•Receipt books</li> <li>•Weighing scale</li> <li>•Meat trays</li> <li>•Knives</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		(d) Managing sales transactions	<b>Brainstorm:</b> Guide the students to define sales  <b>Group discussion:</b> Organize the students in manageable groups to discuss different sales in meat business and how to manage them  <b>Practical work:</b> Guide the students on how to manage sales transactions	<b>The student should be able to:</b> <ul style="list-style-type: none"> <li>•Organize work tools, equipment and materials</li> <li>•Establish objectives and key indicators</li> <li>•Identify your market</li> <li>•Develop sale strategies</li> <li>•Build a strong sale team</li> <li>•Improve customer relationship</li> <li>•Monitor and make follow up of sales</li> </ul>	Sales transactions are managed according to the set standards.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The student should explain how to manage sales  <b>Principles:</b> The student should explain the principles of managing and controlling sales  <b>Theories:</b> The student should explain: <ul style="list-style-type: none"> <li>•Importance of managing sales transactions</li> <li>•Relevance of managing sales transactions</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Complying with the available relevant regulations	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Meat shop/butcher</li> <li>•Cash register</li> <li>•Receipt books</li> <li>•Meat trays</li> <li>•Knives</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	
	2.5 Preparing project proposals	(a) Collecting relevant data on	<b>Brainstorm:</b> Guide the students to	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify and set project objectives</li> </ul>	Relevant data collected for the proposed project	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain	This element can be achieved at a work	92

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
		proposed project	define data, and project  <b>Group discussion</b>  Organize the students in manageable groups to discuss about, different types of data in their school.  <b>Practical work:</b>  Guide the students on how to collect relevant data for the proposed project	<ul style="list-style-type: none"> <li>•Identify type and scope of required data</li> <li>•Identify sources of data</li> <li>•Set methods of data collection</li> <li>•Prepare data collection tools</li> <li>•Test or pilot the data collection tool</li> <li>•Collect relevant data</li> </ul>		how to collect relevant data for the proposed project  <b>Principles:</b> The students should explain the principles of data collection  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Importance of handling data collection</li> <li>•Factors to consider in data collection</li> <li>•Preparation of data collection tools</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Life style and communication skills during data collection	place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>•Computer</li> <li>•Printer</li> <li>•Overall</li> <li>•Gumboots</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	
		(b) Analysing data information	<b>Brainstorm:</b>  Guide the students to explain data analysis	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Collect relevant data</li> <li>•Prepare collected data(clean,</li> </ul>	Collected data properly analysed	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to analyse data information	This element can be achieved at a work place or training institution.  The following tools, equipment and safety	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Practical work:</b>  Guide the students on how to analyse data information	transform, explore and integrate) • Identify method of data analysis • Perform analysis • Validate data • Report or present findings		<b>Principles:</b> The students should explain the principles involved in data analysis  <b>Theories:</b> The students should explain: • Importance of handling data analysis • Factor to consider in data analysis • Methods used in data analysis • Interpretation of analysis results  <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> • Basic knowledge of elementary statistics	gear are to be available:-  • Computer • Printer • White coat • Cape • Clog shoes • Record book	
		(c) Planning the project	<b>Brainstorm:</b>  Guide the students to define main objective and specific objectives	<b>The students should be able to:</b> • Identify project objective and goal • Identify and inform stakeholders for the project • Identify scope of the project	Project planned as per the required standard procedures	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to plan a project  <b>Principles:</b> The students should explain the principles related to project planning	. This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Group discussion:</b> Organize the students in manageable groups to go through different information and identify methods of planning a project  <b>Practical work:</b> Guide the students on how to plan the project	<ul style="list-style-type: none"> <li>•Set work plan for different activities and sub-activities</li> <li>•Develop schedule of activities</li> <li>•Allocate resources</li> <li>•Identify risks and their management</li> <li>•Set performance indicators</li> <li>•Start implementation</li> <li>•Collect relevant data</li> <li>•Analyse data</li> <li>•Prepare action plan and budget</li> </ul>		<b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Importance of project planning</li> <li>•Factors to consider in project planning</li> <li>•Setting of performance indicators</li> <li>•Preparation of schedule of implementation</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Environmental factor</li> <li>•Geographical location of areas</li> </ul>	<ul style="list-style-type: none"> <li>•Computer</li> <li>•Printer</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	
		(d) Implementing the project	<b>Brainstorm:</b> Guide the students to define performance indicators	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Adhere to project plan</li> <li>•Gather and collect needed requirement for the project</li> </ul>	Project efficiently implemented.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to implement a project  <b>Principles:</b> The students should explain the	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Computer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Group discussion:</b>  Organize the students in manageable groups to organize how they can start project implementation  <b>Practical work:</b>  Guide the students to implement the project	<ul style="list-style-type: none"> <li>•Set phases of project implementation</li> <li>•Coordinate execution of the project</li> <li>•Perform monitoring and evaluation of the project</li> <li>•Implement the project</li> </ul>		principles of project implementation  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Factor of consideration in implementing a new project</li> <li>•Essence of performance indicators</li> <li>•Reporting on project implementation</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Environmental factor</li> <li>•Geographical location of areas</li> </ul>	<ul style="list-style-type: none"> <li>•Printer</li> <li>•White coat</li> <li>•Cape</li> <li>•Clog shoes</li> <li>•Record book</li> </ul>	
		(e) Evaluating the project	<b>Brainstorm:</b>  Guide the students to define monitoring and evaluation  <b>Group discussion:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Set evaluation goals</li> <li>•Develop evaluation plan</li> <li>•Collect relevant data</li> <li>•Analyse data</li> <li>•Evaluate project performance</li> </ul>	Project evaluated as per the required procedures	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to evaluate a project <b>Principles:</b> The students should explain the principles involved in project evaluation <b>Theories:</b> The students should explain:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  <ul style="list-style-type: none"> <li>•Computer</li> <li>•Printer</li> <li>•White coat</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Organize the students in manageable groups to visit nearby projects and identify procedures involved in evaluation of the project  <b>Practical work:</b>  Guide the students to project evaluation	<ul style="list-style-type: none"> <li>Identify strength and weaknesses</li> <li>Report findings</li> </ul>		<ul style="list-style-type: none"> <li>Importance of evaluating a project</li> <li>Essential points to consider during project evaluation</li> <li>Report for the identified evaluation findings</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>Environmental factor</li> <li>Geographical location of areas</li> </ul>	<ul style="list-style-type: none"> <li>Cape</li> <li>Clog shoes</li> <li>Record book</li> </ul>	
3.0 Managing meat processing facility and retailing	3.1 Establishing operational duties and manpower administration	(a) Recruiting Staff	<b>Brainstorm:</b>  Guide the students to define recruiting, staff  <b>Role play:</b>  Organize the students in manageable groups to form employer and	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>Establish workforce requirements</li> <li>Make announcement of available job</li> <li>Prepare list of qualified applicants</li> <li>Conduct interview</li> <li>Recruit competent workforce</li> </ul>	Staff a recruited according to the public scheme of service	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to recruit staff  <b>Principles:</b> The students should explain the principle involved in recruiting Staff  <b>Theories:</b> The students should explain:	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>Computer set</li> <li>Printer</li> <li>Dustbins</li> <li>Staff inventory</li> </ul>	74

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			job seeker sides and practice how recruitment is conducted  <b>Practical work:</b>  Guide the students on how to recruit Staff	<ul style="list-style-type: none"> <li>• Orienting recruited staff</li> <li>• Prepare reports</li> <li>• Keep records</li> </ul>		<ul style="list-style-type: none"> <li>• Identification of labour force requirement</li> <li>• Recruitment procedures</li> <li>• Orientation of newly recruited staff.</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Public service Act</li> <li>• Standing orders</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone</li> <li>• Fax Machine</li> <li>• Notice boards</li> <li>• Office cabinet</li> </ul>	
		(b) Developing manpower	<b>Brainstorm:</b>  Guide the students to define manpower  <b>Group discussion</b>  Organize the students to discuss methods used in developing manpower groups to	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Couch staff</li> <li>• Advise staff</li> <li>• Carryout training needs assessment</li> <li>• Organize staff training</li> <li>• Carry out day-to-day supervision</li> <li>• Prepare staff assessment criterion</li> <li>• Conduct staff appraisal</li> <li>• Liaise with both subordinate and</li> </ul>	Manpower development conducted according to the identified skill gaps	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to develop skills of manpower. <b>Principles:</b> The students should explain the principle involved in developing staff skills <b>Theories:-</b> <ul style="list-style-type: none"> <li>• Methods of assessing skill gaps</li> <li>• Methods of developing manpower</li> <li>• Importance of developing manpower resources</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Printer</li> <li>• Dustbins</li> <li>• Staff inventory</li> <li>• Telephone</li> <li>• Fax Machine</li> <li>• Notice boards</li> <li>• Office cabinet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			<b>Practical work:</b>  Guide the students on how to develop manpower	immediate supervisor • Prepare to recommendations for staff • Develop training schedule and programs for staff		<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> • Public service Act • Standing orders • Terms of employment		
		(c) Handling staff welfare	<b>Brainstorm:</b>  Guide the students to define staff welfare  <b>discussion:</b>  Organize the students in manageable groups to prepare a good scheme of service  <b>Practical work:</b>  Guide the students on	<b>The students should be able to:</b> • Develop meat processing facility scheme of service • Identify staff needs • Provide financial security • Maintain physical and mental health of staff • Provide work flexibility environment • Develop staff skills • Build staff to work as a community • Prepare reports • Keep records	Staff welfare handled according to the public scheme of service	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to handle staff welfare <b>Principles:</b> The students should explain the principle of handling staff welfare. <b>Theories:</b> The students should explain: • Essence of staff motivation • Importance of workers organization in the institution • Rules and regulation governing the working • Prepare job description • Prepare employment contract	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  • Computer set • Printer • Dustbins • Staff inventory • Telephone • Fax Machine • Notice boards • Office cabinet	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			handling staff welfare			<ul style="list-style-type: none"> <li>•Categories of employment and emoluments</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Public service Act</li> <li>•Standing orders</li> </ul>		
	3.2 Performing meat processing plant operations	(a) Determining activities and time requirement	<b>Grope discussion :</b>  Guide the students to visit a meat processing facility sections and identify activities performed in each section  <b>Practical work:</b>  Guide the students to determining	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify processing activities</li> <li>•Identify volume of work for each activity</li> <li>•Identify skills requirements for each activity</li> <li>•Number of personnel required in each activity</li> <li>•Starting and finishing time according to customer's demand</li> <li>•Set activities and time requirement</li> </ul>	Activities and time requirements determined correctly	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to determine and time requirements. <b>Principles:</b> The students should explain the principles related to activities and time requirements  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Expected duty section challenges related to activities and time requirement, and possible solutions</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Personal computer/laptop</li> <li>•Printer</li> <li>•File cabinets</li> <li>•Notice board</li> <li>•Clog shoes</li> <li>•Overcoat</li> <li>•White trouser</li> <li>•Cap</li> </ul>	100

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			activities and time requirement			<ul style="list-style-type: none"> <li>•Importance of identifying time requirements for each activity</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Labour rights</li> <li>•Routine check-up of workers health status</li> </ul>		
		(b) Preparing working schedule	<b>Brainstorm:</b> Guide the students to define working schedule  <b>Discussion :</b> Organize the students in manageable groups to prepare a working schedule  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify and distribution workload:</li> <li>•Identify number of available employee</li> <li>•Identify team work capacity and skills</li> <li>•Prepare work schedule</li> </ul>	Smooth and efficient working schedule prepared	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare a working schedule <b>Principles:</b> The students should explain the principles of preparing a working schedule <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Expected duty section challenges related to working schedule and possible solutions</li> <li>•Factors to consider in preparation of work schedule</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Personal computer/laptop</li> <li>•Printer</li> <li>•Telephone</li> <li>•Fax machine</li> <li>•File cabinets</li> <li>•Notice board</li> <li>•Dustbins</li> <li>•Clog shoes</li> <li>•Overcoat</li> <li>•White trouser</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Guide the students on how to preparing working schedule			<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Labour rights</li> <li>•Routine check-up of workers health status</li> </ul>	<ul style="list-style-type: none"> <li>•Cap</li> </ul>	
		(c) Supervising meat processing activities	<b>Brainstorm:</b> Guide the students to define supervision  <b>Practical work:</b> Guide the students on how to supervise meat processing activities	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare work schedule</li> <li>•Coordinate meat plant operations</li> <li>•Supervise meat processing activities</li> <li>•Lease workers and management</li> <li>•Record production</li> <li>•Prepare report on production</li> <li>•Order meat processing supplies</li> </ul>	Meat processing activities well supervised	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to supervise meat processing activities <b>Principles:</b> The students should explain the principles involved in making meat processing supervision. <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>•Occupational health safety in the processing plant</li> <li>•Expected duty section challenges and possible solutions</li> <li>•Necessity of supervising meat processing activities</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Personal computer/laptop</li> <li>•Printer</li> <li>•Telephone</li> <li>•Fax machine</li> <li>•File cabinets</li> <li>•Notice board</li> <li>•Dustbins</li> <li>•Clog shoes</li> <li>•Overcoat</li> <li>•White trouser</li> <li>•Cap</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
						<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Labour rights</li> <li>• Routine medical check-up</li> </ul>		
		(d) Coordinating meat plant operations	<b>Activity:</b> Organize the students in manageable groups to visit a nearby meat plant and observe different operations  <b>Practical work:</b> Guide the students on how to coordinate meat plant operations	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify meat plant operations</li> <li>• Identify basic activities in each operation</li> <li>• Allocate relevant manpower skills to each operation</li> <li>• Provide mentorship to manpower</li> <li>• Record production</li> <li>• Prepare report on production</li> <li>• Order meat processing supplies</li> </ul>	Meat plant operations Coordinated as per the required procedures	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to coordinate meat plant operations  <b>Principles:</b> The students should explain the principles involved in coordinating meat plant operations  <b>Theories:</b> The students should explain: <ul style="list-style-type: none"> <li>• Occupational health safety in the processing plant</li> <li>• Expected duty section challenges and possible solutions</li> </ul> <b>Circumstantial knowledge</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Personal computer/laptop</li> <li>• Printer</li> <li>• Telephone</li> <li>• Fax machine</li> <li>• File cabinets</li> <li>• Notice board</li> <li>• Dustbins</li> <li>• Clog shoes</li> <li>• Overcoat</li> <li>• White trouser</li> <li>• Cap</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Safe handling of tools, equipment and machines</li> <li>• Labour rights</li> <li>• Routine check-up</li> </ul>		
	3.3 Procuring supplies	(a) Establishing daily requirements of meat plant supplies	<b>Activity:</b>  Organize the students in manageable groups to identify daily requirements of meat plant supplies  <b>Practical work:</b>  Guide the students on how to establish daily requirements of meat plant supplies	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify volume of production</li> <li>• Identify customer's orders</li> <li>• Assess raw materials requirements</li> <li>• Plan labour requirements</li> <li>• Prepare list of daily requirements</li> </ul>	Daily requirements of meat plant accurately established.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to establish daily requirements for a meat processing plant.  <b>Principles:</b> The students should explain the principles of establishing requirement for meat processing plant  <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>• The role of PPRA and NEST in procurement of goods and services</li> <li>• Perishable and non - perishable raw materials requirements.</li> </ul> <b>Circumstantial knowledge</b>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Printer</li> <li>• Communication set</li> <li>• File cabinet</li> <li>• Notice board</li> <li>• Dustbins</li> </ul>	100

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
						<b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Specifications of requirements</li> <li>• Expiry dates for consumables</li> <li>• Quality or right grades of slaughter stock</li> <li>• Public Procurement Act and Regulations</li> </ul>		
		(b) Planning and budgeting for procurement of meat plant supplies	<b>Brainstorm:</b> Guide the students to define planning, budget  <b>Group discussion;</b> Organize the students in manageable groups to discuss budget components  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify meat processing and necessary supplies</li> <li>• Estimate quantities of the needed supplies</li> <li>• Carry survey of current market prices</li> <li>• Identify and include additional costs</li> <li>• Allocate budget categories</li> <li>• Draft the budget</li> <li>• Review the budget</li> </ul>	Meat plant plan and budgeting for procurement of supplies prepared as per the required procedures	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to plan and prepare plan and budget for procurement of meat plant supplies <ul style="list-style-type: none"> <li>• Manage consumable and non-consumable supplies</li> <li>• Maintain supplies records</li> </ul> <b>Principles:</b> The students should explain the principles involved in planning and budgeting for procurement of goods  <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>• Importance of Planning and budgeting for</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Printer</li> <li>• Communication set</li> <li>• File cabinet</li> <li>• Notice board</li> <li>• Dustbins</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Guide the students on how to plan and prepare budget for procurement of meat plant supplies			procurement of meat plant supplies <ul style="list-style-type: none"> <li>•The role of PPRA and nest in procurement of goods and services</li> <li>•Planning and budgeting for procurement of meat plant supplies</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Specifications of tools/ equipment</li> <li>•Transportation of slaughter stock</li> <li>•Public Procurement Act and Regulations</li> </ul>		
		(c) Ordering of the supplies	<b>Brainstorm:</b>  Guide the students to define order, supplier  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify requirements</li> <li>•Fill in a requisition form</li> <li>•Obtain approval</li> <li>•Evaluate the available suppliers</li> <li>•Prepare and issue purchasing order</li> </ul>	Ordering of the supplies performed as per PPRA and NEST laid down guidelines	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to make order for purchasing supplies. <b>Principles:</b> The students should explain the principles of ordering supplies	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Computer set</li> <li>•Printer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Guide the students on how to prepare order for different types of supplies	<ul style="list-style-type: none"> <li>• Confirm the order</li> <li>• Receive supplies</li> <li>• Process payment</li> <li>• Establish safety order level</li> <li>• Carryout coding of procured items</li> </ul>		<b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>• Importance of observing lead time in ordering supplies</li> <li>• The role of PPRA and NEST in procurement of goods and services</li> <li>• Maintain supplies records</li> <li>• Ordering of the supplies</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Public Procurement Act and Regulations	<ul style="list-style-type: none"> <li>• Communication set</li> <li>• File cabinet</li> <li>• Notice board</li> <li>• Dustbins</li> </ul>	
		(d) Receiving and recording the supplies	<b>Discussion:</b> Organize the students in manageable groups to visit a nearby abattoir and identify different types of goods  <b>Practical work:</b>	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Check and reconcile received goods and purchasing order</li> <li>• Inspect details of the received supplies</li> <li>• Acknowledge receipt and sign the delivery note</li> <li>• Record the supplies</li> <li>• Carryout coding of procured items</li> </ul>	Receiving and recording the supplies performed as per PPRA and NEST laid down guidelines	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to receive and record supplies <b>Principles:</b> The students should explain the principles of receiving and recording supplies <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>• Essence of separation of different items in storage</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Printer</li> <li>• Communication set</li> <li>• File cabinet</li> <li>• Notice board</li> <li>• Dustbins</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			Guide the students on how to receive and record the supplies	<ul style="list-style-type: none"> <li>• Maintain institutional inventory</li> </ul>		<ul style="list-style-type: none"> <li>• Importance of observing lead time in ordering supplies</li> <li>• Process of receiving and issuing goods</li> <li>• The role of PPRA and NEST in procurement of goods and services</li> </ul> <p><b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Public Procurement Act and Regulations</p>		
	3.4 Planning layout of meat processing and retail facility	(a) Planning and layout slaughter slabs and house	<p><b>Brainstorm:</b></p> <p>Guide the students to define slaughter slabs, slaughter house</p> <p><b>Discussion:</b></p> <p>Organize the students in manageable groups to identify site for construction of</p>	<p><b>The students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify the land</li> <li>• Interpret drawings</li> <li>• Evaluate the site</li> <li>• Secure legal documents</li> <li>• Perform environmental impact assessment</li> <li>• Make a foundation of slaughter house or slab</li> </ul>	slaughter slabs and house designed according to the required standards	<p><b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to plan and make lay out of slaughter house and slabs</p> <p><b>Principles:</b> The students should explain the principle involved in designing and planning lay out of slaughter house and slabs</p> <p><b>Theories:</b> The students should explain :</p>	This element can be achieved at work place or training institution. The following tools, equipment and safety gear should be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Drawing set</li> <li>• Calculator</li> <li>• Printer</li> <li>• Communication set</li> <li>• File cabinet</li> <li>• Dustbins</li> <li>• Overall</li> <li>• Cap.</li> </ul>	100

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			slaughter slabs and house  <b>Practical work:</b>  Guide the students on how to plan and layout slaughter slabs and house			<ul style="list-style-type: none"> <li>• Essence of observing environmental impact</li> <li>• factors to consider in planning lay out of slaughter house and slab</li> <li>• Different dressing systems used in slaughter house facilities</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Land use plan for the specific area</li> <li>• Safety precautions involved in land use plan per specific area</li> </ul>		
		(b) Planning layout meat processing plant	<b>Brainstorm:</b>  Guide the students to define meat processing plant  <b>Site visit:</b>  Organize the students in manageable	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify the land</li> <li>• Evaluate the site</li> <li>• Interpret drawings</li> <li>• Secure legal documents</li> <li>• Perform environmental impact assessment</li> <li>• Identify utility source</li> </ul>	Meat processing plant designed and constructed according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to make lay out of meat plant  <b>Principles:</b> The students should explain the principle involved in planning layout a meat plant	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>• Computer set</li> <li>• Drawing set</li> <li>• Calculator</li> <li>• Printer</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			groups to identify site for construction of meat processing plant  <b>Practical work:</b>  Guide the students on how to plan layout of meat processing plant	•Make a foundation of the meat plant		<b>Theories:</b> The students should explain : •Essence of observing environmental impact •Factors to be considered in site selection <b>Circumstantial knowledge Detailed knowledge about:</b> •Land use plan for the specific area •Safety precautions involved in land use plan per specific area	•Communication set •File cabinet •Dustbins •Overall •Cap	
		(c) Planning layout meat shop	<b>Site visit:</b>  Organize the students in manageable groups to identify site for setting up meat shop  <b>Practical work:</b>  Guide the students to plan	<b>The students should be able to:</b> •Select site for retail facility •Design retail facility •Interpret drawings •Adhere to set standards minimum requirements •Identify source of utilities •Identify drainage mechanisms	Meat shop designed and constructed according to the required standards	<b>Knowledge evidence: Detailed knowledge of: Method used:</b> The students should explain how to make planning layout of meat shop  <b>Principles:</b> The students should explain the principle of designing meat retail shops <b>Theories:</b> The students should explain : •Essence of observing environmental impact	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  •Computer set •Drawing set •Calculator •Printer •Communication set •File cabinet	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			and layout meat shop			<ul style="list-style-type: none"> <li>•Important points to be considered in site selection</li> <li>•Minimum set standards for erecting retail shops</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Land use plan for the specific area</li> <li>•Safety precautions involved in land use plan per specific area</li> </ul>	<ul style="list-style-type: none"> <li>•Dustbins</li> <li>•Overall</li> <li>•Cap</li> </ul>	
		(d) Equipping slaughter and retail facility	<b>Brainstorm:</b>  Guide the students to define ordinary, standard and prime butchers  <b>Discussion:</b>  Organize the students in manageable groups to visit butchers and identify meat	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Prepare list of needed equipment</li> <li>•Identify specifications</li> <li>•Survey to identify sources for slaughter and retail facility equipment</li> <li>•Make quotations</li> <li>•Order equipment for slaughter and retail shop.</li> </ul>	Slaughter house and retail shop equipped according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to equip slaughter house and retail facility  <b>Principles:</b> The students should explain the principle of equipping slaughter and retail facility <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>•Types of equipment needed in slaughter facilities</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Computer set</li> <li>•Drawing set</li> <li>•Calculator</li> <li>•Printer</li> <li>•Communication set</li> <li>•File cabinet</li> <li>•Dustbins</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			shop equipment  <b>Practical work:</b>  Guide the students to equip slaughter and retail facility			<ul style="list-style-type: none"> <li>•Types of equipment needed in meat shop</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Complying with local and international regulations	<ul style="list-style-type: none"> <li>•Overall</li> <li>•Cap.</li> </ul>	
	3.5 Planning preventive maintenance	(a) Buildings and machines inventory	<b>Brainstorm:</b>  Guide the students to define inventory  <b>Site visit:</b>  Organize the students in manageable groups to visit different school section to identify maintaining of	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Identify and categorize building and machine</li> <li>•Make physical inspection of assets</li> <li>•Code or record details of each asset.</li> <li>•Register assets</li> <li>•Perform routine check of assets</li> <li>•Perform maintenance and repair of assets</li> </ul>	Buildings and machines inventory kept working conditions to the set standards.	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to maintain inventory of building and machines <b>Principles:</b> The students should explain the principles of maintaining meat processing facility inventory  <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>•Importance of Buildings and machines inventory</li> <li>•Type of meat processing inventories.</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Record book</li> <li>•Computer set</li> <li>•Printer</li> <li>•Telephone</li> <li>•File cabinet</li> <li>•Notice board</li> <li>•Dust bins</li> <li>•Overall</li> </ul>	74

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			tools and equipment inventory through coding <b>Practical work:</b>  Guide the students to design and keep buildings and machines inventory			<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> • Infrastructures depreciation rate • Effect of weather in infrastructure maintenance.		
		(b) Prepare buildings , machines and waste disposal system inspection schedule	<b>Brainstorm:</b>  Guide the students to define waste, inspection  <b>Site visit:</b>  Organize the students in manageable groups to arrange buildings, machines and waste disposal	<b>The students should be able to:</b> • Identify inspection points • Set inspection dates for each section • Identify faults • Prepare preventive maintenance measures • Arrange schedule of waste disposal	Buildings, machines and waste disposal systems maintained according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to make schedule of activities <b>Principles:</b> The students should explain the principles of inspecting buildings ,machines and waste disposal systems <b>Theories:</b> The students should explain : • Importance of inspection schedule	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- :- • Record book • Computer set • Printer • Telephone • File cabinet • Notice board • Dust bins	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			system inspection  <b>Practical work:</b>  Guide the students to prepare buildings, machines and waste disposal system inspection schedule			<b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>• Infrastructures depreciation rate</li> <li>• Effect of weather in infrastructure maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Overall</li> </ul>	
		(c) Prepare maintenance program	<b>Brainstorm:</b>  Guide the students to define routine, preventive, emergence and corrective maintenance  <b>Discussion:</b>  Organize the students in manageable	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>• Identify faults</li> <li>• Record faults</li> <li>• Identify for requirements for maintenance</li> <li>• Prepare programs for infrastructure maintenance</li> <li>• Coordinate maintenance programmes</li> <li>• Determine costs of maintenance</li> </ul>	Maintenance program prepared according to the required standards	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to prepare maintenance program  <b>Principles:</b> The students should explain the principles of maintaining meat processing facility infrastructures.  <b>Theories:</b> The students should explain :	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:-  :- <ul style="list-style-type: none"> <li>• Record book</li> <li>• Computer set</li> <li>• Printer</li> <li>• Telephone</li> <li>• File cabinet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			groups to walk around the school and identify areas for maintenance and suggest for required maintenance  <b>Practical work:</b>  Guide the students on how to prepare maintenance program			<ul style="list-style-type: none"> <li>•Necessity of maintenance schedule.</li> <li>•Bases of preventive maintenance</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> <ul style="list-style-type: none"> <li>•Infrastructures depreciation rate</li> <li>•Effect of weather in infrastructure maintenance</li> </ul>	<ul style="list-style-type: none"> <li>•Notice board</li> <li>•Dust bins</li> <li>•Overall</li> </ul>	
	3.6 Preparing report	(a) Collecting information	<b>Brainstorm:</b>  Guide the students to define report  <b>Group discussion:</b>  Organize the students to discuss	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Make preparations for data collection</li> <li>•Identify areas or sections for data collection</li> <li>•Identify respondents</li> <li>•Collect data</li> <li>•Compile data</li> <li>•Keep records</li> </ul>	Relevant information collected according to the set format	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to collect information's  <b>Principles:</b> The students should explain the principles involved in collection of information	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Computer set</li> <li>•Printer</li> <li>•Ruler</li> <li>•Table</li> </ul>	500

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			different types of reports  <b>Practical work:</b>  Guide the students on how to collect information			<b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>•Factors to consider in data collection</li> <li>•Categorise work sections</li> <li>•Type of data to be collected in each section</li> <li>•Importance of collecting data</li> </ul> <b>Circumstantial knowledge</b> <b>Detailed knowledge about:</b> Basic computer programs	<ul style="list-style-type: none"> <li>•Telephone</li> <li>•File cabinet</li> <li>•Notice board</li> </ul>	
		(b) Prepare report	<b>Brainstorm:</b>  Guide the students to identify and discuss basic components of a report  <b>Practical work:</b>  Guide the students on how	<b>The students should be able to:</b> <ul style="list-style-type: none"> <li>•Make preparations for writing a report</li> <li>•Set major component of a report</li> <li>•Organise data or information for each component of a report</li> <li>•Write zero draft report</li> </ul>	Report prepared according to the set format	<b>Knowledge evidence:</b> <b>Detailed knowledge of:</b> <b>Method used:</b> The students should explain how to write a report  <b>Principles:</b> The students should explain the principles involved in report writing  <b>Theories:</b> The students should explain : <ul style="list-style-type: none"> <li>•Importance of report writing</li> </ul>	This element can be achieved at a work place or training institution.  The following tools, equipment and safety gear are to be available:- <ul style="list-style-type: none"> <li>•Computer set</li> <li>•Printer</li> <li>•Ruler</li> <li>•Table</li> <li>•Telephone</li> <li>•File cabinet</li> </ul>	

Module Title (Main Competence)	Unit Title (Specific Competences)	Elements (Learning Activities)	Suggested Teaching and Learning Methods	Assessment Criteria			Training Requirements/ Suggested Resources	Number of Periods per Unit
				Process Assessment	Knowledge Assessment	Underpinning Knowledge		
			to write and submit a report	<ul style="list-style-type: none"> <li>• Perform editing of the report</li> <li>• Submit the report</li> <li>• Keep records</li> </ul>		<ul style="list-style-type: none"> <li>• Reporting format</li> <li>• Basics components of normal report</li> <li>• Importance of report writing</li> <li>• Feedback information to subordinates on the prepared report</li> </ul> <p><b>Circumstantial knowledge</b>  <b>Detailed knowledge about:</b>  Basic computer knowledge.</p>	• Notice board	

## **12. BIBLIOGRAPHY**

Ministry of Education, Science and Technology. (2023). Curriculum for Ordinary Secondary Education, Form I–IV. Dar es Salaam: Tanzania Institute of Education.

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