



**Based on March, 2018, Version 3 Occupational standards
(OS)**



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PREFACE

The reformed Ethiopian TVET-System is an outcome-based system. It utilizes the needs of the labour market and occupational requirements from the world of work as the benchmark and standard for TVET delivery. The requirements from the world of work are analyzed and documented taking into account international benchmarking as Ethiopian Occupational Standards (EOS). In the reformed Ethiopian TVET-System, Curricula and Curriculum Development play an important role with regard to quality driven TVET-Delivery. Curricula help to facilitate the learning process in a way, that learners acquire the set of occupational competencies (skills, knowledge and attitude (SAK)) required at the working place and defined in the Ethiopian Occupational Standards (EOS). Responsibility for Curricula and Curriculum Development will be given to the Regional TVET-Authorities and TVET-Providers.

This curriculum has been developed by a group of experts from different Regional TVET-Colleges based on the Ethiopian Occupational Standard Animal Health Care Services Level IV. It has the character of a model curriculum and is an example on how to transform the occupational requirements as defined in the respective Ethiopian Occupational Standard into an adequate curriculum.

TVET-Program Design

TVET-Program Title: Animal Health Care Services, L-IV

TVET-Program Description

The Program is designed to develop the necessary knowledge, skills and attitude of the learners to the standard required by the EOS. The contents of this program are in line with the Ethiopian Occupational Standard (EOS). Learners who successfully completed

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the Program will be qualified to work as an Animal Health Care Services technician with competencies elaborated in the respective EOS. Graduates of the Program will have the required qualification to work in the Agriculture sector in the field of Animal Health Care Services.

The prime objective of this training program is to equip the learners with the identified competences specified in the EOS. Graduates are therefore expected to Perform Minor Surgical and Obstetrical Operations, Perform General Animal Health Care, Euthanize Sick, Injured or Unwanted Animals, Participate in Prescription and Administration of Veterinary Drug, Carry-out Veterinary Public Health Activities, Control Trans-boundry Animal Diseases with Others in the Animal Care Industry, Participate in Herd Health Management Program, Conduct Basic Laboratory Techniques and Procedures, Develop knowledge of Pathological Lesions, Identify and Handle Major Diseases of Ruminants, Poultry and Swine, Identify and Handle Major Diseases of Equines and Swine, Identify and Handle Diseases of Companion Animals, Identify and Handle Diseases of Wild Animals, Conduct Animal Health Extension Service Delivery, Supervise Animal Health Programs, Develop and Implement Community Programs, Analyze and Interpret Service Data for Animal Health, Plan and Organize Work, Migrate to New Technology, Establish Quality Standards, Develop Individuals and Team. Utilize Specialized Communication Skills, Manage Micro, Small and Medium Enterprises (MSMEs), Apply Problem Solving Techniques and Tools in accordance with the performance criteria described in the EOS.

TVET-Program Unit of Competencies

The expected outputs of this program are the acquisition and implementation of the following units of competence in Animal Health Care Services L-IV

AGR AHC4 01 0318 Perform Minor Surgical and Obstetrical Operations

AGR AHC4 02 0318 Perform General Animal Health Care

AGR AHC4 03 0318 Euthanize Sick, Injured or Unwanted Animals

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AGR AHC4 04 0318Participate in Prescription and Administration of Veterinary Drug

AGR AHC4 05 0318Carry-out Veterinary Public Health Activities

AGR AHC4 06 0318Control Trans-boundry Animal Diseases with Others in the Animal Care Industry

AGR AHC4 07 0318Participate in Herd Health Management Program

AGR AHC4 08 0318Conduct Basic Laboratory Techniques and Procedures

AGR AHC4 09 0318Develop knowledge of Pathological Lesions

AGR AHC4 10 0318Identify and Handle Major Diseases of Ruminants, Poultry and Swine

AGR AHC4 11 0318Identify and Handle Major Diseases of Equines and Swine

AGR AHC4 12 0318Identify and Handle Diseases of Companion Animals

AGR AHC4 13 0318Identify and Handle Diseases of Wild Animals

AGR AHC4 14 0318Conduct Animal Health Extension Service Delivery

AGR AHC4 15 0318Supervise Animal Health Programs

AGR AHC4 16 0318Develop and Implement Community Programs

AGR AHC4 17 0318Analyze and Interpret Service Data for Animal Health

AGR AHC4 18 0318Plan and Organize Work

AGR AHC4 19 0318Migrate to New Technology

AGR AHC4 20 0318Establish Quality Standards

AGR AHC4 21 0318Develop Individuals and Team

AGR AHC4 22 0318Utilize Specialized Communication Skills

AGR AHC4 23 0318Manage Micro, Small and Medium Enterprises (MSMEs)

AGR AHC4 24 0318Apply Problem Solving Techniques and Tools



Duration of the TVET-Program

The Program will have duration of **1240 hours** including the cooperative training.

No.	Unit Competency	On school Training		Cooperative Training	Total Hours	Remark
		Theory	Practical			
1.	Apply Problem Solving Techniques and Tools	20	5	5	30	
2.	Utilize Specialized Communication Skills	15	5	5	25	
3.	Develop Individuals and Team	15	5	5	25	
4.	Analyze and Interpret Service Data for Animal Health	20	5	5	30	
5.	Manage Micro, Small and Medium Enterprises (MSMEs)	25	10	10	45	
6.	Perform General Animal Health Care	20	20	10	50	
7.	Identify Pathological Lesions, Abnormalities and Conditions	40	20	20	80	
8.	Identify and Handle Major Diseases of Ruminants, Poultry and swine	50	20	20	90	
9.	Identify and Handle Major Diseases of Equines and Swine	30	20	10	60	
10.	Identify and Handle Diseases of Companion Animals	25	15	10	50	
11.	Identify and Handle Diseases of Wild Animals	40	10	10	60	
12.	Control Trans-boundary Animal Diseases with Others in the Animal Care Industry	35	15	10	60	
13.	Conduct Basic Laboratory	30	40	20	90	



	Techniques and Procedures					
14.	Participate in Prescription and Administration of Veterinary Drug	40	25	10	75	
15.	Carry-out Veterinary Public Health Activities	45	35	10	90	
16.	Perform Minor Surgical and Obstetrical Operations	40	35	10	85	
17.	Euthanize Sick, Injured or Unwanted Animals	20	10	5	35	
18.	Participate in Herd Health Management Program	20	20	10	50	
19.	Establish quality specifications for product	30	5	5	40	
20.	Plan and Organize Work	15	5	5	25	
21.	Migrate to New Technology	10	10	5	25	
22.	Conduct Animal Health Extension Service Delivery	15	5	5	25	
23.	Supervise Animal Health Programs operations	20	15	10	45	
24.	Develop and Implement Community Programs	30	10	10	50	
Total calculated					1240hrs	
Total to be provided						

Qualification Level and Certification

Based on the descriptors elaborated on the Ethiopian TVET Qualification Framework (NTQF) the qualification of this specific TVET Program is Animal Health Care Service “**Level IV**”. The learner can exit after successfully completing the Modules in one level and will be awarded the equivalent institutional certificate on the level completed. The



learner can also exit after completing the program. However, only certificate of attainment or attendance (this is institutional discretion) will be awarded.

Target Groups

No special target group is assigned for the Program. Any citizen who meet the entry requirements and capable of participating in the learning activities is entitled to take part in the Program.

Entry Requirements

The prospective participants of this program on are required to possess the following:

- Have completed 12th grade general education
- Ability to **speak, read and understand English**

Mode of Delivery

This TVET-Program is characterized as a formal Program on middle level technical skills. The mode of delivery is co-operative training. The TVET-institution and identified companies have forged an agreement to co-operate with regard to implementation of this program. The time spent by the learners in the veterinary field will give them enough exposure to the actual world of work and enable them to get hands-on experience.

The co-operative approach will be supported with **lecture-discussion, simulation and actual practice**. These modalities will be utilized before the learners are exposed to the industry environment.



TVET-Program Structure

1.9. TVET-Program Structure					
Unit of Competence title and code		Module Number and Title		Learning Outcomes	Hours
AGR AHC4 24 0318	Apply Problem Solving Techniques and Tools	AGR AHC4 01 0921	Applying Problem Solving Techniques and Tools	<ul style="list-style-type: none"> Identify and select theme/problem Grasp current status and set goal Establish activity plan Analyze causes of a problem Examine countermeasures and their implementation Assess effectiveness of the solution Standardize and sustain operation 	30
AGR AHC4 22 0318	Utilize Specialized Communication Skills	AGR AHC4 02 0921	Utilizing Specialized Communication Skills	<ul style="list-style-type: none"> Meet common and specific communication needs of clients and colleagues Contribute to the development of communication strategies Represent the 	25



				organization <ul style="list-style-type: none"> Facilitate group discussion Conduct interview 	
AGR AHC4 21 0318	Develop Individuals and Team	AGR AHC4 03 0921	Developing Individuals and Team	<ul style="list-style-type: none"> Provide team leadership Foster individual and organizational growth Monitor and evaluate workplace learning Develop team commitment and cooperation Facilitate accomplishment of organizational goals 	25
AGR AHC4 17 0318	Analyze and Interpret Service Data for Animal Health	AGR AHC4 04 0921	Analyzing and Interpreting Service Data for Animal Health	<ul style="list-style-type: none"> Collect and organize service data Analyze and interpret data Present data 	30
AGR AHC4 23 0318	Manage Micro, Small and Medium Enterprises (MSMEs)	AGR AHC4 05 0921	Managing Micro, Small and Medium Enterprises (MSMEs)	<ul style="list-style-type: none"> Develop and communicate Strategic work plan Identify daily work requirements and Develop effective work 	45



				habits <ul style="list-style-type: none"> • Manage Marketing of MSMEs • Manage Human Resources • Manage production and Operation • Maintain financial records and use for decision making • Monitor, Manage and Evaluate work performance 	
AGR AHC4 02 0318	Perform General Animal Health Care	AGR AHC4 06 0921	Performing General Animal Health Care	<ul style="list-style-type: none"> • Monitor animal health needs • Prepare for Treatment of Animals • Administer animal treatments • Implement follow-up procedures 	50
AGR AHC4 09 0318	Identify Pathological Lesions, Abnormalities and Conditions	AGR AHC4 07 0921	Identifying Pathological Lesions, Abnormalities and Conditions	<ul style="list-style-type: none"> • Describe pathological terminologies • Identify cellular injury • Identify inflammatory reactions and exudates • Identify pathological circulatory 	80



				disorders <ul style="list-style-type: none"> • Identify disorders of cell/tissue growth • Assist in post mortem examinations 	
AGR AHC4 10 0318	Identify and Handle Major Diseases of Ruminants, Poultry and Swine	AGR AHC4 08 0921	Identifying and Handling Major Diseases of Ruminants, Poultry and Swine	<ul style="list-style-type: none"> • Identify Hazard and risks • Identify and handle infectious disease of ruminants, poultry and swine • Identify and handle non-infectious disease of Ruminants, poultry and swine 	90
AGR AHC4 11 0318	Identify and Handle Major Diseases of Equines and Swine	AGR AHC4 09 0921	Identifying and Handling Major Diseases of Equines and Swine	<ul style="list-style-type: none"> • Identify Hazard and risks • Identify and handle infectious disease of Equine and Camels • Identify and handle non-infectious disease of Equine and Camels 	60
AGR AHC4 12 0318	Identify and Handle Diseases of Companion Animals	AGR AHC4 10 0921	Identify and Handle Diseases of Companion Animals	<ul style="list-style-type: none"> • Identify Hazard and risks • Identify and handle infectious disease of Dogs and Cats • Identify and handle non-infectious disease of Dogs and Cats 	50



AGR AHC4 13 0318	Identify and Handle Diseases of Wild Animals	AGR AHC4 11 0921	Identifying and Handling Diseases of Wild Animals	<ul style="list-style-type: none"> • Identify Hazard and risks • Identify and handle major infectious disease of wild animals • Identify and handle non-infectious disease of wild animals 	60
AGR AHC4 06 0318	Control Trans-boundary Animal Diseases with Others in the Animal Care Industry	AGR AHC4 12 0921	Controlling Trans-boundary Animal Diseases with Others in the Animal Care Industry	<ul style="list-style-type: none"> • Follow OHS procedure • Identify major Trans-boundary animal diseases and their impact in the region • Participate in the agreed control and eradication of Trans boundary animal diseases • Record and reporting TADs 	60
AGR AHC4 08 0318	Conduct Basic Laboratory Techniques and Procedures	AGR AHC4 13 0921	Conducting Basic Laboratory Techniques and Procedures	<ul style="list-style-type: none"> • Follow OHS practices and Assist in work place hazard Identification and risk control • Prepare material and equipment and process sample for test • Conduct basic laboratory procedures 	90



AGR AHC4 04 0318	Participate in Prescription and Administration of Veterinary Drug	AGR AHC4 14 0921	Participating in Prescription and Administration of Veterinary Drug	<ul style="list-style-type: none"> • Identification and control of drug use and associated risk management procedures • Manage and administer drugs, biological and fluids • Assist in stock control and clinic security 	75
AGR AHC4 05 0318	Carry-out Veterinary Public Health Activities	AGR AHC4 15 0921	Carrying out Veterinary Public Health Activities	<ul style="list-style-type: none"> • Perform community awareness on veterinary public health issues • Prepare to conduct the ante mortem and post-mortem examination • Carry out post-mortem examination • Complete the post-mortem examination • Develop knowledge of public health issues associated with food of animal origin 	85
AGR AHC4 01 0318	Perform Minor Surgical and Obstetrical Operations	AGR AHC4 16 0921	Performing Minor Surgical and Obstetrical Operations	<ul style="list-style-type: none"> • Carry out pre-surgical preparation • Perform minor surgical and obstetrical operations • Carry out post-operative 	85



				procedures	
AGR AHC4 03 0318	Euthanize Sick, Injured or Unwanted Animals	AGR AHC4 17 0921	Euthanizing Sick, Injured or Unwanted Animals	<ul style="list-style-type: none"> • Prepare animal to euthanasia under supervision • Carry out euthanasia of an animal • Complete euthanasia 	35
AGR AHC4 07 0318	Participate in Herd Health Management Program	AGR AHC4 18 0921	Participating in Herd Health Management Program	<ul style="list-style-type: none"> • Identify Hazard and risks • Participate in the Planning of herd health programs • Participate in the implementation of regular herd health activities • Record, Analyze and store Herd health and production information 	50
AGR AHC4 20 0318	Establish quality specifications for product	AGR AHC4 19 0921	Establishing quality specifications for product	<ul style="list-style-type: none"> • Establish quality specifications for product • Identify hazards and critical control points • Assist in planning of quality assurance procedures 	40



				<ul style="list-style-type: none"> • Implement quality assurance procedures • Monitor quality of work outcome • Participate in maintaining and improving quality at work • Report problems that affect quality 	
AGR AHC4 18 0318	Plan and Organize Work	AGR AHC4 20 0921	Planning and Organizing Work	<ul style="list-style-type: none"> • Set objectives • Plan and schedule work activities • Implement work plans • Monitor work activities • Review and evaluate work plans and activities 	25
AGR AHC4 19 0318	Migrate to New Technology	AGR AHC4 21 0921	Migrating to New Technology	<ul style="list-style-type: none"> • Apply existing knowledge and techniques to technology and transfer • Apply functions of technology to assist in solving organizational problems • Evaluate new or upgraded technology performance 	25
AGR AHC4 14	Conduct Animal	AGR AHC4 22 0921	Conducting Animal	<ul style="list-style-type: none"> • Perform awareness on locally 	25



0318	Health Extension Service Delivery		Health Extension Service Delivery	<ul style="list-style-type: none"> prevailing livestock disease • Perform community based disease control program • Build a strategy to minimize risk of disease spread to new areas • Advocate new technology 	
AGR AHC4 15 0318	Supervise Animal Health Programs operations	AGR AHC4 23 0921	Supervising Animal Health Programs	<ul style="list-style-type: none"> • Monitor and assess animal health • Facilitate the participation of workers in animal welfare compliance • Implement and monitor enterprise animal welfare procedures • Implement preventative health strategies • Record and review the animal health program 	45
AGR AHC4 16 0318	Develop and Implement Community Programs	AGR AHC4 24 0921	Developing and Implementing Community Programs	<ul style="list-style-type: none"> • Develop program parameters • Design programs with the community • Implement programs • Evaluate programs 	50



1.10. Institutional Assessment

Two types of evaluation will be used in determining the extent to which learning outcomes are achieved. The specific learning outcomes are stated in the modules. In assessing them, verifiable and observable indicators and standards shall be used

The formative assessment is incorporated in the learning modules and form part of the learning process. Formative evaluation provides the learner with feedback regarding success or failure in attaining learning outcomes. It identifies the specific learning errors that need to be corrected, and provides reinforcement for successful performance as well. For the trainer/facilitator, formative evaluation provides information for making instruction and remedial work more effective.

Summative Evaluation the other form of evaluation is given when all the modules in the unit of competence have been accomplished. It determines the extent to which competence have been achieved. And, the result of this assessment decision shall be expressed in the term 'competent or not yet competent'. Techniques or tools for obtaining information about learners' achievement include oral or written test, demonstration and field observation.

1.11. Trainer's / Facilitator's Profile

For this particular TVET Program and especially for the main modules, trainers / facilitators are expected to have B- level (in TVET qualification system) in related fields of studies and satisfactory practical experiences, or equivalent qualifications and relevant experience.

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LEARNING MODULE 01

TVET-PROGRAMME TITLE:	Animal Health Care Service Level- IV
MODULE TITLE:	Applying Problem Solving Techniques and Tools
MODULE CODE:	AGR AHC4 M01 0921
NOMINAL DURATION :	30Hours

MODULE DESCRIPTION: This Modules covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen Element on continual basis.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

LO1: Identify and select theme/problem.

LO2: Grasp current status and set goal.

LO3: Establish activity plan.

LO4: Analyze causes of a problem.

LO5:Examine countermeasures and their implementation.

LO6: Assess effectiveness of the solution

LO7: Standardize and sustain operation.

MODULE CONTENT

LO1: Identify and select theme/problem

- 1.1. Following Safety requirements.
- 1.2. Listing kaizen elements by using statistical tools and techniques.
- 1.3. Identifying and listing kaizen element on Visual Management Board.
- 1.4. Classifying problems based on obviousness of cause and action
- 1.5. Selecting critical factors
 - 1.5.1. The number of customers affected,
 - 1.5.2. Potentials for bottlenecks and



1.5.3. Number of complaints

1.6. Selecting and emphasizing problems related to priorities of Kaizen Element.

LO2: Grasp current status and set goal.

2.1. Identifying the extent of the problem

2.2. Setting appropriate and achievable goal

LO3: Establish activity plan.

3.1. Confirming the problem.

3.2. Selecting high priority problem

3.3. Defining the extent of the problem

3.4. Establishing activity plan

LO4: Analyze causes of a problem.

4.1. Listing all possible causes of a problem

4.2. Analysing cause relationships by using 4M1E

4.3. Identifying causes of the problems.

4.4. Selecting root causes

4.5. Selecting the root cause related to the problem

4.6. Listing creative idea generation to eliminate root cause.

4.7. Testing and Evaluating the suggested solutions

4.8. Preparing detailed summaries of the action plan.

LO5: Examine countermeasures and their implementation.

5.1. Implementing Action plan by medium KPT members.

5.2. Monitoring implementation and checking activities with present plan

LO6: Assess effectiveness of the solution

6.1. Identifying tangible and intangible results.

6.2. Verifying the results over time.

6.3. Comparing tangible results by using diagram.

LO7: Standardize and sustain operation



- 7.1. Standardizing new procedures and making part of daily activities
- 7.2. Training all employees on the new Standard Operating Procedures (SOPs).
- 7.3. Verifying and following SOP
- 7.4. Selecting the next problem



LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines • Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)



Group discussion	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member • 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member • Inform the group members to speak loudly 	❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> • Use sign language interpreter • Provide briefing /orientation on the assignment • Provide visual recorded material 	<ul style="list-style-type: none"> • Provide briefing /orientation on the assignment • Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges



	<ul style="list-style-type: none"> Time extension 		
Written test	<ul style="list-style-type: none"> Prepare the exam using short sentences, multiple choices, True or False, matching and short answers Avoid essay writing Time extension 	<ul style="list-style-type: none"> Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> Use oral response as an option to give answer for trainees having severe upper limb impairment Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension



ASSESSMENT CRITERIA:

LO1: Identify and select theme/problem.

- Safety requirements are followed in accordance with safety plans and procedures.
- All possible problems related to the process /Kaizen Element are listed using statistical tools and techniques.
- All possible problems related to kaizen Element are identified and listed on Visual Management Board/Kaizen Board.
- Problems are classified based on obviousness of cause and action.
- Critical factors like the number of customers affected, Potentials for bottlenecks, and number of complaints etc... is selected
- Problems related to priorities of Kaizen Element are given due emphasis and selected.

LO2: Grasp current status and set goal.

- The extent of the problem is defined.
- Appropriate and achievable goal is set.

LO3: Establish activity plan.

- The problem is confirmed.
- High priority problem is selected.
- The extent of the problem is defined.
- Activity plan is established as per 5W1H.

LO4: Analyze causes of a problem.

- All possible causes of a problem are listed.
- Cause relationships are analysed using 4M1E.
- Causes of the problems are identified.
- Root causes are selected.
- The root cause which is most directly related to the problem is selected.



- All possible ways are listed using creative idea generation to eliminate the most critical root cause.
- The suggested solutions are carefully tested and evaluated for potential complications.
- Detailed summaries of the action plan are prepared to implement the suggested solution.

LO5: Examine countermeasures and their implementation.

- Action plan is implemented by medium KPT members
- Implementation is monitored according to the agreed procedure and activities are checked with present plan.

LO6: Assess effectiveness of the solution

- Tangible and intangible results are identified.
- The results are verified over time.
- Tangible results are compared with targets using various types of diagram.

LO7: Standardize and sustain operation.

- If the goal is achieved, the new procedures are standardized and made part of daily activities.
- All employees are trained on the new Standard Operating Procedures (SOPs).
- SOP is verified and followed by all employees.
- The next problem is selected to be tackled by the team.

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ANNEX: RESOURCE REQUIREMENT				
AGR AHC4 M1 0921:Applying problem solving tools Techniques				
No	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	Text books			
1.1.	Kaizen (Ky'zen)	Book by Masaaki Imai	1	1:25
2.	TTLM	Teacher Guide	25	1:1
B.	Learning Facilities & Infrastructure			
1	Well-equipped Audio visual room	8 x 5 sqm	1	1:25
2	Well-equipped Lecture rooms (with tables, chairs and whiteboard)	8 x 5 sqm	1	1:25
3	School Bus	Comfortable for 25 trainee	1	1:25
C.	Consumable Materials			
1	Note pads, Pens, Marker	Pack	As required	
2	Paper	Pack	„	
3	Pencil		„	
4	Kaizen Board		„	



D.	Tools and Equipment's			
2	Printer	Colored/mono	1	1:25
3.	Laptop	Toshiba core i 7	1	1:25
4.	LCD	Standard	1	1:25



LEARNING MODULE 02

TVET-PROGRAM TITLE: Animal Health Care Service, Level IV

MODULE TITLE: Utilizing Specialized Communication Skills

MODULE CODE: AGR AHC4 020921

NOMINAL DURATION: 25 Hours

MODULE DESCRIPTION:

This module covers the knowledge, attitudes and skills to lead in the dissemination and discussion of information and issues in the workplace.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:

LO1: Meet common and specific communication needs of clients and colleagues

LO2: Contribute to the development of communication strategies

LO3: Represent the organization

LO4: Facilitate group discussion

LO5: Conduct interview



MODULE CONTENTS:

LO1: Meet common and specific communication needs of clients and colleagues

- 1.1 Identify and meet specific communication needs of clients and colleagues
- 1.2 Use different approaches to meet communication needs of clients and colleagues
- 1.3 Addressing conflict promptly and in a timely way and in a manner which does not compromise

LO2: Contribute to the development of communication strategies

- 2.1 Develop, promote, implement and review strategies for internal and external dissemination of information
 - 2.1.1 Recognizing own limitations
 - 2.1.2 Utilizing techniques and aids
 - 2.1.3 Providing written drafts
 - 2.1.4 Verbal and non-verbal communication
- 2.2 Establish and review the channels of communication regularly
- 2.3 Provide coaching in effective communication
- 2.4 Maintain the necessary work related network and relationship
- 2.5 Use the required negotiation and conflict resolution strategies
- 2.6 Making an appropriate communication with clients and colleagues
- 2.7 Making an appropriate communication to individual needs and organizational vision.

LO3: Represent the organization

- 3.1 Presenting and researching when participating in internal or external fora, presentation is relevant, appropriately and promote manner
- 3.2 Making the presentation in clear and sequential.
 - 3.2.1 Delivered the presentation within a predetermined time



3.3 Utilizing an appropriate media to enhance presentation	
3.4 Respecting differences in views	
3.5 Making written communication as organizational standards.	
3.6 Responding inquiries in a manner consistent with organizational standard	
LO4: Facilitate group discussion	
4.1 Define and implementing the mechanisms to enhance effective group interaction	
4.1.1 Identifying and evaluating what is occurring within an interaction in a non-judgmental way	
<ul style="list-style-type: none">• Using active listening• Making decision about appropriate words and behaviour• Putting together response which is culturally appropriate• Expressing an individual perspective• Expressing own philosophy, ideology and background and exploring impact with relevance to communication	
4.2 Conducting different types of interview according to organization procedures	
<ul style="list-style-type: none">• Discussing related to staff issues• Routine• Confidential• Evidential• Non-disclosure• Disclosure	
4.3 Making and maintaining records of interviews as required	
4.4 Use and passed an effective questioning, listening and non-verbal communication techniques.	
LEARNING STRATEGIES	
1. Demonstration	
2. Practical and hand to work	



3. Lecture and discussion

MODULE ASSESSMENT

Assessment Methods

- Written test from the underpinning knowledge
- Oral question or interview
- Practical assessment by direct observation
- Certificate from training

Assessment schedule outcome

- Assessment will be conducted in each learning guides

Assessment Conditions

- The participant will have access to fully equipped work place or materials, equipment necessary and consumable materials.

Assessment Criteria

LO1: Meet common and specific communication needs of clients and colleagues

- Specific communication needs of clients and colleagues are identified and met.
- Different approaches are used to meet communication needs of clients and colleagues.
- Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization.

LO2: Contribute to the development of communication strategies

- Strategies for internal and external dissemination of information are developed, promoted, implemented and reviewed as required.
- Channels of communication are established and reviewed regularly.



- Coaching in effective communication is provided
- Work related network and relationship are maintained as necessary.
- Negotiation and conflict resolution strategies are used where required.
- Communication with clients and colleagues is made appropriate to individual needs and organizational objectives.

LO3: Represent the organization

- When participating in internal or external fora, presentation is relevant, appropriately researched and presented in a manner to promote the organization.
- Presentation is made clear and sequential and delivered within a predetermined time.
- Appropriate media is utilized to enhance presentation.
- Differences in views are respected.
- Written communication is made consistent with organizational standards.
- Inquiries are responded in a manner consistent with organizational standard.

LO4: Facilitate group discussion

- Mechanisms which enhance effective group interaction are defined and implemented.
- Strategies which encourage all group members to participate are used routinely.
- Objectives and agenda are routinely set and followed for meetings and discussions.
- Relevant information are provided to group to facilitate outcomes.
- Evaluation of group communication strategies is undertaken to promote participation of all parties.
- Specific communication needs of individuals are identified and addressed.



LO5: Conduct interview

- A range of appropriate communication strategies are employed in interview situations.
- Different types of interview are conducted in accordance with the organizational procedures.
- Records of interviews are made and maintained in accordance with organizational procedures.
- Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.



RESOURCE REQUIREMENTS (Annex)				
Module Code and Title: AGR AHC4020921 Utilizing Specialized Communication Skills				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	Reference books	Communication style and method, 1997 1 st edition	5	1:5
2	Reference manuals	To be prepared by the trainer	5	1:5
3	TTLM	To be prepared by the trainer	5	1:5
4	Written and graphical illustration	To be prepared by the trainer	5	1:5
5	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer or organisation	5	1:5
6	Researches	International or national journals	5	1:5
7	Computer	DELL, acer, IBM, Lenevo, HP	5	1:5
B. Learning Facilities & Infrastructure				
1.	Virtual library with multimedia equipment (LCD project, Television, Flesh, software and CD)	Concrete block (144m2 maintained regularly)	1	1: 25
2.	Well-equipped Computer Room	Concrete block (100m2 maintained regularly)	1	1:25
3	Brochures		25	25:25
4	Magazines		1	1:25
5	Written and present each BIOGRAPHY		25	1:1
6	Simulation class as		1	1:1



	VIP			
7	Well-equipped lecture room (with tables, chairs, White board)	Concrete block (64m ² maintained regularly)	1	1:25
8	Laboratory room equipped with benches and tables	Concrete block (169 m ² maintained regularly)	1	1:25
C. Consumable Materials				
1.	Audio - video CD		1	1:25
2.	Magnetic tape reels		1	1:25
3	Record books		1	1:25
4	Paper			As required
5	Permanent record sheet		25	25:25
D. Tools and equipment's				
1.	Radio		1	1: 25
2.	Television	32 inch LCD screen	1	1:25
3	Broad band internet service		1	1:25
4	Cell phone		1	1:25



LEARNING MODULE 03	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level- IV
MODULE TITLE:	Developing Individuals and Team
MODULE CODE:	AGR AHC4 M3 0921
NOMINAL DURATION :	25 Hours
MODULE DESCRIPTION: This Module covers the knowledge, skills and attitude required to determine individual and team development needs and facilitate the development of the workgroup.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1: Provide team leadership LO2: Foster individual and organizational growth LO3: Monitor and evaluate workplace learning LO4: Develop team commitment and cooperation LO5: Facilitate accomplishment of organizational goals	
MODULE CONTENT LO1: Provide team leadership 1.1. Identifying and implementing Learning needs 1.2. Developing and implementing learning plan 1.3. Encouraging individuals to self-evaluate performance 1.4. Collecting feedback on performance of team members LO2: Foster individual and organizational growth 2.1. Identifying Learning and development program goals and objectives 2.2. Making Learning delivery methods 2.3. providing Workplace learning opportunities 2.4. Identifying Resources and timelines required for learning activities.	



LO3. Monitor and evaluate workplace learning

- 3.1. Using Feedback from individuals or Teams.
- 3.2. Assessing and Recording Outcomes and performance of individuals/teams.
- 3.3. Negotiating modifications to learning plans
- 3.4. maintaining Records and reports

LO4: Develop team commitment and cooperation

- 4.1 . Using Open communication processes.
- 4.2. Reaching decisions by the team
- 4.3. Developing mutual concern and camaraderie.

LO5: Facilitate accomplishment of organizational goals

- 5.1.Participating in team activities and communication processes.
- 5.2.Developing Individual and joint responsibility by team's members
- 5.3.Sustaining Collaborative efforts



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in <u>Brail format</u> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop



Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	work		with other group member ❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	<ul style="list-style-type: none"> ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 			
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ASSESSMENT METHODS:

Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
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Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment
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ASSESSMENT CRITERIA:

LO1: Provide team leadership

- Learning and development needs are systematically identified and implemented in line with organizational requirements.
- Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented.
- Individuals are encouraged to self-evaluate performance and identify areas for improvement.
- Feedback on performance of team members is collected from relevant sources and compared with established team learning process.

LO2: Foster individual and organizational growth

- Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.
- Learning delivery methods are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources.
- Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies.
- Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.

LO3: Monitor and evaluate workplace learning

- Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.
- Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.
- Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.



- Records and reports of competence are maintained within organizational requirement.

LO4: Develop team commitment and cooperation

- Open communication processes to obtain and share information is used by team.
- Decisions are reached by the team in accordance with its agreed roles and responsibilities.
- Mutual concern and camaraderie are developed in the team.

LO5: Facilitate accomplishment of organizational goals

- Team members are actively participated in team activities and communication processes.
- Individual and joint responsibility is developed by team's members for their actions.
- Collaborative efforts are sustained to attain organizational goals.



ANNEX: RESOURCE REQUIREMENT				
AGR AHC4 M3 0921:Developing individual Team				
No	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	Text books			
1.1.	The Effective Manager”	by Mark Horst man	1	1:25
1.2	The Five Dysfunctions of a <i>Team</i>	by Patrick Lencioni	1	1:25
1.3	Dream <i>Teams</i> ,	by Shane Snow	1	1:25
2.	TTLM	Teacher Guide	25	1:1
B.	Learning Facilities & Infrastructure			
1	Well-equipped Audio visual room	8 x 5 sqm	1	1:25
2	Well-equipped Lecture rooms (with tables, chairs and whiteboard)	8 x 5 sqm	1	1:25
3	School Bus	Comfortable for 25 trainee	1	1:25
C.	Consumable Materials			



5	Note pads, Pens, Marker	Pack		As required
D.	Tools and Equipment's			
2	Printer	Colored/mono	1	1:25
3.	Laptop	Toshiba core i 7	1	1:25
4.	LCD	Standard	1	1:25



LEARNING MODULE 04	
TVET-PROGRAM TITLE: Animal Health Care Service, Level IV	
MODULE TITLE: Analysing and Interpreting Service Data for Animal Health	
MODULE CODE: AGR AHC404 0921	
NOMINAL DURATION: 30 Hours	
MODULE DESCRIPTION: This aims to provide the trainees with the basic knowledge, skills and attitude required for analyzing and interpreting service data for animal health. It covers the ability to collect and organize service data, analyze, interpret and present data.	
LEARNING OUTCOMES At the end of the lesson the trainee will be able to know LO1: Collect and organize service data LO2: Analyze and interpret data LO3: Present data	
MODULE CONTENTS: LO1: Collect and organize service data 1.1. Collecting and organizing information in suitable format for analysis and interpretation 1.1.1. Describe methods to collect and analyze service data 1.1.2. Quality assurance and/or procedures manuals, bio security 1.1.3. Requirements, animal welfare, procedures for updating records, OHS policies, procedures and programs, service plans, systems and processes, and defined resource parameters. 1.2. Assessing information held by the service unit for accuracy and relevance 1.3. Making reliable and efficient use data collecting methods 1.4. Use access, organize and monitor data for Business equipment 1.4.1. Using photocopier, computer, internet, software programs, answering machine, fax machine and telephone systems 1.5. Update, modify, maintain and store information LO2: Analyse and interpret data	



- 2.1 Defining and consistent the objective of analysis clearly
- 2.2 Making reliable and suitable methods of data analysis to research purposes
 - 2.2.1 Use and apply Feedback on results, review of previous data and service figures, peer review, data sampling and statistical analysis
- 2.3 Enterprise guidelines and procedures relating to collection, analysis and maintenance of service data
 - 2.3.1 Make a clear, justified and consistent assumption analysis
- 2.4 Supporting and contributing the achievement of business objectives

LO3: Present data

- 3.1 Prepare data in an appropriate format, style and structure using suitable business technology
- 3.2 Make clear and conform structure and format of reports
- 3.3 Report and distribute findings
- 3.4 Obtain feedback and comments on suitability and sufficiency of findings

LEARNING STRATEGIES

1. Demonstration
2. Practical and hand to work
3. Lecture and discussion

MODULE ASSESSMENT

1 Assessment Methods

- Practical assessment by direct observation of tasks through simulation/Role-plays
- Case studies
- Written exam/test on underpinning knowledge
- questioning or interview on underpinning knowledge
- project-related conditions (real or simulated)



- Certificate from training providers or employers

2 Assessment schedule outcome

- Assessment will be conducted in each learning outcome and the trainee will attach to the enterprises for cooperative training, propose real or simulated project will be appraised at the end of the module.

3 Assessment Conditions

- The participant will have access to fully equipped work place or clinic materials, equipment necessary and consumable materials.

Assessment Criteria

LO1: Collect and organize service data

- Information is collected and organized in a format suitable for analysis and interpretation in accordance with enterprise requirements.
- Information held by the service unit is assessed for accuracy and relevance in line with enterprise requirements.
- Methods of collecting data are made reliable and efficient use of resources in accordance with organizational requirements.
- Business equipment are used to access, organize and monitor data in accordance with organizational requirements.
- Information is updated, modified, maintained and stored in accordance with organizational requirements.

LO2: Analyze and interpret data

- Objectives of analysis are clearly defined and consistent with enterprise requirements.
- Methods of data analysis are made reliable and suitable to research purposes.
- Assumptions used in analyses are made clear, justified and consistent with enterprise



objectives.

- Conclusions are supported by evidence and contributed to the achievement of business objectives.

LO3: Present data

- Data are prepared in an appropriate format, style and structure using suitable business technology.
- Structure and format of reports are made clear and conform to enterprise requirements.
- Findings are reported and distributed in accordance with enterprise requirements.
- Feedback and comments on suitability and sufficiency of findings is obtained in accordance with enterprise requirements.

RESOURCE REQUIREMENTS (Annex)

Module Code and Title: AGR AHC4 M07 2021

Analyzing and Interpreting Service Data for Animal Health

Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	Reference books	• Relevant reference books	3	1:5
2	Reference manuals	To be prepared by the trainer	3	1:5
3	TTLM	To be prepared by the trainer	3	1:5
4	Written and graphical illustration	To be prepared by the trainer	3	1:5
5	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer or organisation	3	1:5
6	Researches	International or national journals	3	1:5
7	Computer	DELL, acer, IBM, compaque	5	1:3
B. Learning Facilities & Infrastructure				
1.	Virtual library with	Concrete block (144m2	1	1:25



	multimedia equipment(LCD project, Television, software and CD)	maintained regularly)		
2.	Well-equipped Computer Room	Concrete block (100m ² maintained regularly)	1	1:25
3	Farm		1	1:25
4	Well-equipped lecture room (with tables, chairs, White board)	Concrete block (64m ² maintained regularly)	1	1:25
5	Laboratory room equipped with benches and Tables	Concrete block (169 m ² maintained regularly)	1	1:25
C. Consumable Materials				
1.	Paper			As required
2.	Record books			As required
3	Different softwares			As required
4	Fire extinguishers			As required
5	Fire fighter's protective cloths			As required
6	Daily record sheet		5	1:5
7	Stationary equipment's			As required
D Tools and equipments				
1.	Photocopier	Standard size	1	1:25
2.	Computer	Standard size	1	1:25
3	Internet	Standard size	1	1:25
4	Software programs (SPSS, stata 12)	Standard size	1	1:25
5	Answering machine	Standard size	1	1:25
6	Fax machine	Standard size	1	1:25
7	Telephone systems	Standard size	1	1:25



8	Ambulance (optional)	Standard size	1	1:25
9	Oxygen therapy Apparatus	Standard size	1	1:30
10	First aid kit	Standard size	1	1:30



LERNING MODULE GUIDE 05	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Managing Micro, Small and Medium Enterprises (MSMEs)
MODULE CODE :	AGR AHCS4M05 09 21
NOMINAL DURATION :	45Hours
MODULE DESCRIPTION: This module covers knowledge, skills and attitude required in running Micro, Small and Medium enterprises. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1 Develop and communicate Strategic work plan LO2 Identify daily work requirements and Develop effective work habits LO3 Manage Marketing of MSMEs LO4 Manage Human Resources LO5 Manage production and Operation LO6 Maintain financial records and use for decision making LO7 Monitor, Manage and Evaluate work performance	
MODULE CONTENT LO1: Develop and communicate Strategic work plan 1.1. Discussing the importance of planning 1.2. Communicating the basics of planning 1.3. Addressing measurable and realistic short-term business objective 1.4. Discussing how to develop realistic activities plans 1.5. Introducing and understanding major components of work plan 1.5.1. Objective 1.5.2. Responsibilities 1.5.3. Resources	



1.5.4. Activities

1.6. Understanding the importance of reviewing plans

LO2: Identify Daily Work Requirements and Develop Effective Work Habits

2.1. Discussing and understanding concept of effective working culture

2.2. Developing and understanding different approaches to work culture

2.3. Identifying and giving work requirements

2.3.1. Human resource

2.3.2. Money

2.3.3. Time

2.3.4. Machines

2.3.5. Equipment and Space

2.4. Prioritizing work activities

2.5. Allocating work to relevant staff

2.6. Identifying and achieving work between competing priorities

2.6.1. Prioritizing and anticipating

2.6.2. Short term and long term planning and scheduling

2.6.3. Creating a positive and organized work environment

2.6.4. Clear timelines and goal setting

2.6.5. Breaking large tasks into smaller tasks

2.7. Seeking and using internal and external sources to refine new ideas and approaches

2.7.1. Staff and colleagues

2.7.2. Management, supervisors, advisors or head office

2.7.3. Professionals consultants

2.7.4. Professional associations

2.8. Responding business or inquiries to promptly and effectively

2.9. Presenting information in a format to the industry and audience

LO3: Manage Marketing of MSMEs



- 3.1. Identifying and analysing opportunities on market
- 3.2. Evaluating marketing mix and components
- 3.3. Determining marketing mix for specific target market
- 3.4. Adjusting and monitoring marketing mix

LO4: Manage Human Resources

- 4.1. Identifying and determining human resource rules, regulations law and procedures
 - 4.1.1. Recruitment and selection criteria
 - 4.1.2. Orientation and placement
 - 4.1.3. Training and development
 - 4.1.4. Performance appraisal and reward system
 - 4.1.5. Disciplinary procedures
 - 4.1.6. Movement and separation
 - 4.1.7. Industrial relation
- 4.2. Identifying audited gaps and the existing human resource
- 4.3. Conducting recruitment and selection
- 4.4. Orienting and placing selected candidates
- 4.5. Conducting appraisal of employees' performance
- 4.6. Using appraisal result for training, promotion, and compensation,
- 4.7. Maintaining employee relations
 - 4.7.1. Relationship within employees
 - 4.7.2. Relationship among employees and management
 - 4.7.3. Relationship between labour union and government

LO5: Manage Production and Operation

- 5.1. Developing and implementing production /operation plan
- 5.2. Maintaining and purchasing required inputs and adequate inventories
- 5.3. Checking and controlling production /operation process
- 5.4. Applying and maintaining quality control



LO6: Maintain Financial Records and Use for Decision Making

- 6.1. Discussing and understanding the objective and benefits of financial records
- 6.2. Identifying and recording asset, liabilities and capital
- 6.3. Discussing balance sheet and different journals
- 6.4. Discussing, analysing, classifying and recording business transactions
- 6.5. Maintaining daily financial records correctly
- 6.6. Preparing and distributing invoices and payments
- 6.7. Collecting outstanding accounts or followed-up.
- 6.8. Identifying and discussing revenue, expense and costs
- 6.9. Discussing and maintaining different ledgers and subsidiary ledgers
- 6.10. Preparing profit and loss report
- 6.11. Conducting financial interpretation
- 6.12. Preparing financial manual

LO7: Monitor, Manage and Evaluate Work Performance

- 7.1. Coordinating people, resources and equipment
- 7.2. Communicating staff and clients
 - 7.2.1. Sales targets
 - 7.2.2. Budgetary targets
 - 7.2.3. Team and individual goals
 - 7.2.4. Production targets
 - 7.2.5. Reporting deadlines
- 7.3. Applying problem solving techniques to work situations
 - 7.3.1. Brainstorming
 - 7.3.2. Fish bone
 - 7.3.3. Focus group discussion and Problem tree
- 7.4. Monitoring opportunities for improvements



7.5. Adjusting work schedules

7.6. Communicating and recording changes to aid planning and evaluation

7.7. Using codes of practice to guide an ethical approach to workplace practices



LEARNING METHODS:				
For None ImairedTraines	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture- discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<ul style="list-style-type: none"> • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 			on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow



				up <ul style="list-style-type: none"> • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees



				having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension



ASSESSMENT CRITERIA

LO1 Develop and communicate Strategic work plan

- The importance of planning is sensitized before acting and about the importance of plans to reduce risks and to inhibit impulsive actions and discussed.
- The basics of planning and beginning with goal setting are communicated.
- The achievement of measurable and realistic short-term business objective is addressed.
- How to develop realistic activities plans and schedule is discussed.
- Major components of work plan are introduced and understood.
- The importance of constant reviewing their plans is understood by monitoring the results.

LO2: Identify Daily Work Requirements and Develop Effective Work Habits

- Basic concept about effect working culture is discussed and understood.
- Different approaches to work culture are developed and understood.
- Work requirements are identified for a given time period by taking into consideration of resources and constraints.
- Work activities are prioritized based on business needs, requirements and deadlines.
- If appropriate, work is allocated to relevant staff or contractors to optimize efficiency.
- Work and personal priorities are identified and a balance is achieved between competing priorities using appropriate time management strategies.
- Input is sought from internal and external sources and used to develop and refine new ideas and approaches.
- Business or inquiries is/are responded to promptly and effectively.
- Information is presented in a format appropriate to the industry and audience.

LO3: Manage Marketing of MSMEs



- Information on market and business needs is analysed and market opportunities identified.
- Marketing mix and components are evaluated.
- Marketing mix for specific target market is determined.
- Marketing mix is monitored and continual adjusted against marketing performance

LO4: Manage Human Resources

- Human resource rules, regulations law and procedures are identified and determined.
- The existing human resource is audited, and gaps are identified.
- Recruitment and selection are conducted based on the organizational requirements.
- Selected candidates are oriented and placed for the appropriate position.
- Appraisal of employees' performance is conducted.
- Appraisal result is used for training and development, promotion, compensation, disciplinary measures and other purposes as required.
- **Employee relations** are maintained.

LO5 Managing Production and Operation

- Production /operation plan is developed and implemented.
- Required inputs are purchased and adequate inventories maintained.
- Production /operation process is checked and controlled.
- Quality control is applied and maintained.

LO6: Maintain Financial Records and Use for Decision Making

- The objective and benefits of financial records are discussed and understood.
- Asset, liabilities and capital are identified and recorded.
- Balance sheet and different journals are discussed.
- Business transactions are discussed, analysed, classified and recorded.



- Daily financial records are maintained correctly in accordance with legal and accounting requirements.
- Invoices and payments are prepared and distributed in timely manner and in accordance with legal requirements.
- Outstanding accounts are collected or followed-up.
- Revenue, expense and costs are identified and discussed.
- Different ledgers and subsidiary ledgers are discussed and maintained.
- Profit and loss report is prepared.
- Financial interpretation is conducted with assistant from the appropriate person.
- Financial manual is prepared.

LO7: Monitor, Manage and Evaluate Work Performance

- People, resources and/or equipment are coordinated to provide optimum results.
- Staff, clients and/or contractors are communicated within a clear and regular manner, to monitor work in relation to business goals or timelines.
- Problem solving techniques are applied to work situations to overcome difficulties and achieve positive outcomes.
- Opportunities for improvements are monitored according to business demands.
- Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements.
- Proposed changes are clearly communicated and recorded to aid in future planning and evaluation.
- Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.

Annex: Resource Requirements

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			September 2021



AGR AHCS4M23 09 21 : Managing Micro, Small and Medium Enterprises (MSMEs)				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Journals/Publication/Magazines		25	1:1
3.	Books	<ul style="list-style-type: none"> Business and management Small business Management Essential ingredient for success 		1:5
4.	Manuals	<ul style="list-style-type: none"> Training Manual for Small Business Management Strategic management for small and medium enterprise 		
B.	Learning Facilities & Infrastructure			
1.	Lecture room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Work station	Equipped with household facility and hand wash basin Standard	1	1:25
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
D.	Tools and Equipments			
1.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
2.	Marker	Standard	5	
3.	Laptop	Ram 2, hard disk 500 GB	1	1:25
4.	Daster	Standard	1	



5.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
6.	Telephone	Standard	5	1:5
7.	Blackboard	Standard	1	1:25
8.	Brail	Standard	25	1:1
9.	Audio-video	Standard	1	1:25



LERNING MODULE 06	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Performing General Animal Health Care
MODULE CODE :	AGR AHCS4M06 09 21
NOMINAL DURATION :	50Hours
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to carry out monitoring of the health and wellbeing of animals, including young animals and those with special needs. It also describes prior preparation and treatment and post treatment follow-up procedures.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1 Monitor animal health needs LO2 Prepare for Treatment of Animals LO3 Administer animal treatments LO4 Implement follow-up procedures	
MODULE CONTENT LO1:Monitor animal health needs 1.1. Maintaining personal hygiene and cleanliness 1.2. Monitoring health and wellbeing of animals 1.3.1. Identifying abnormal animal behaviour 1.3.2. Abnormal animal behavior 1.3. Identifying and planning treatment options for diseases 1.4.1. Categories of diseases 1.4.2. Animal treatments 1.4.1. Prophylactic and therapeutic treatments 1.4. Separating and caring sick or injured animals 1.5. Maintaining required health records LO2: Prepare for Treatment of Animals 2.1. Identifying animals requiring treatment	



- 2.2. Determining the type and severity of infestation of parasites
- 2.3. Sourcing information on past treatment of animals
- 2.4. Determining and preparing the type and scope of treatment
- 2.5. Preparing equipment and materials and treatment site

LO3:Administer Animal Treatments

- 3.1. Handling and restraining animals
- 3.2. Administering animal treatments
- 3.3. Identifying treated animals from non-treated animals
- 3.4. Implementing preventative medicine programs
 - 3.4.1. Strategic de-worming
 - 3.4.2. Insect control
 - 3.4.3. Quarantine
 - 3.4.4. Chemo prophylactic treatments
 - 3.4.5. Vaccination

LO4:Implement follow-up procedures

- 4.1. Monitoring and reporting animal health and condition post-treatment
- 4.2. Performing follow up of diseased and/or treated animals
- 4.3. Identifying, assessing and controlling environmental implications
- 4.4. Cleaning equipment and worksite and disposing waste
- 4.5. Storing health treatments
- 4.6. Documenting relevant information.



LEARNING METHODS:				
For None ImairedTrain es	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture- discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<p>the physical feature of the work shop</p> <ul style="list-style-type: none"> Summarize main points 			<p>on the physical feature of the work shop</p>
Demonstration	<ul style="list-style-type: none"> Conduct close follow up Use verbal description Provide special attention in the process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> use Sign language interpreter Use video recorded material Ensure attention of the trainees Provide structured training Show clear and short method Use gesture Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Illustrate in clear & short method Use Video recorded material Ensure the attention of the trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide



				tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



			process/ practical training	
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:				



Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration /Observation	<ul style="list-style-type: none"> • Brief the instruction or provide them in large text/Brail • Time extension 	<ul style="list-style-type: none"> • Use sign language interpreter • Brief on the instruction of the exam • Provide activity-based/ practical assessment method • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Brief on the instruction of the exam • Use loud voice • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Conduct close follow up • Time extension
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Assessment Criteria

LO1. Apply existing knowledge and techniques to technology and transfer

- Exist knowledge for developing new skills is identified
- New or upgraded technology skills is reacquired and used
- New or upgraded equipments are identified, classified and used

LO2. Apply functions of technology to assist in solving organizational problems

- Testing of new or upgraded equipment is conducted
- Features of new or upgraded equipment is applied
- Features and functions of new or upgraded equipment is used
- Sources of information relating to new or upgraded equipment is accessed and used

LO3. Evaluate new or upgraded technology performance

- New or upgraded equipment is evaluated
- Environmental considerations is determined from new or upgraded equipment
- Feedback seen from appropriate users



Annex Resource Requirements

AGR AHC4 06 09 21: Performing General Animal Health Care				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Journals/Publication/Magazines		25	1:1
3.	Books	<ul style="list-style-type: none"> Veterinary Pharmacology and therapeutics. 8thed. 2000. R. H. Adams Black well publishers The Merck veterinary manual. CD-R. 8th ed. 2008. Veterinary epidemiology. 3rded 2008. M. Thrust field. Applications of quantitative methods in epidemiology. Norduhzien and his collages. Veterinary clinical epidemiology. 2006. R. D.smith. Mosby. 	1 each	
4.	Manuals			



B.	Learning Facilities and Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Work station	Equipped with household facility and hand wash basin Standard	1	1:25
4.	Open air clinic	Standard	1	
5.	Farm	Shoat farm, dairy and beef farm, poultry farm	1 each	
6.	Laboratory room equipped with benches and tables	Standard	1	
7.	Crush	Bovine standard	1	
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4.	Marker	Pack	1	
5.	Filip chart	Pack	1	
4.	Chalk	Pack	1	
5.	Disposable syringe	Pack (5ml)	1	
5.	Disposable syringe	Pack (10ml)	1	
6.	Slide and cover slips	Pack	1 each	
7.	Swabs	Pack	1	



D.	Personal Protective Equipments			
1.	Glove	Pack	1	
2.	Savlon	Lit	1	
3.	Alcohol	Lit	1	
5.	Arm length glove	Pack	1	
6.	Detergents			As required
7.	Gown	Standard	26	1:1
E	Different types of vaccines and drugs			
1.	Different type of vaccine	Dose		As required
2.	Antibiotic drugs			As required
3.	Anthelmintic drugs			As required
4.	Antifungal drugs			As required
5.	Antiprotozoal drugs			As required
D.	Tools and Equipments			
1.	Mortar and pestle	Standard As required Baerman apparatus	2	
2.	Fecal centrifuge	Manual Electrical	1 each	
3.	McMaster slide	Standard	4	
4.	Haemocytometer	Standard	2	
5.	Hematocrit centrifuge with reader	Standard	1	
6.	Microscope	Compound Stereo microscope	3 each	
7.	Syringe	Manual syringe	6	



		Automatic syringe	5	
8.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
9.	Duster	Standard	1	
10.	Laptop	Ram 2, hard disk 500 GB	1	1:25
11.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
12.	Telephone	Standard	5	1:5
13.	Blackboard	Standard	1	1:25
14.	Brail	Standard	25	1:1
15..	Audio-video		1	1:25



LEARNING MODULE 07

TVET-PROGRAM TITLE: Animal Health Care Service, Level IV

MODULE TITLE: Identifying Pathological Lesions, Abnormalities and Conditions

MODULE CODE: AGR AHC4 07 0921

NOMINAL DURATION: 80 Hours

MODULE DESCRIPTION: This module aims to provide the trainees with the basic knowledge, skills and attitude required to identify pathological lesions, abnormalities and conditions, and to properly apply in the diagnosis and treatment of a range of animal diseases.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:-

LO1: Describe pathological terminologies

LO2: Identify cellular injury

LO3: Identify inflammatory reactions and exudates

LO4: Identify pathological circulatory disorders

LO5: Identify disorders of cell/tissue growth

LO6: Assist in post mortem examinations

MODULE CONTENTS:

LO1: Describe pathological terminologies

1.1 Describing concepts of pathology

1.2 Identifying an associated pathological terminologies

LO2: Identify cellular injury

2.1 Understanding abnormal changes (lesions) on the body

2.1.1 Describing cellular response to injury

2.2 Identify the principal types of cellular injury

2.3 Identify changes of cell damage



- 2.3.1 Identifying degeneration
- 2.3.2 Identifying necrosis
- 2.3.3 Identifying extracellular accumulations

LO3: Identify inflammatory reactions and exudates

- 3.1 Describe an inflammatory reactions of body
- 3.2 Identify acute inflammation
 - 3.2.1 Identify cardinal signs
 - 3.2.2 Identify the phases of acute inflammation
 - 3.2.3 Identify the inflammatory exudates
- 3.3 Identify and describe chronic inflammation and the cells involved in it
- 3.4 Identify and describe clinical inflammatory lesions types
 - 3.4.1 Describe maculae, vesicle, pustule, nodule, erosion, ulcer, scab, and crust
- 3.5 Recognize tissue repair and healing process

LO4: Identify pathological circulatory disorders

- 4.1 Describe and identify impaired blood supply to tissues (ischemia and infarction) and its causes
 - 4.1.1 Describe thrombosis, embolism and vasoconstriction
- 4.2 Identify the nature and characteristics of ischemia and infarctions
- 4.3 Identify abnormal findings of circulatory system
 - 4.3.1 Describe hyperaemia, congestion, jaundice/icterus and etc.
- 4.4 Identify and describe the development, causes and effects of oedema
- 4.5 Identify shock and the different types and causes

LO5: Identify disorders of cell/tissue growth

- 5.1 Identify the congenital defects of the different body systems
- 5.2 Identify an adaptive changes in cell



5.3 Describe and identify common types of neoplasia

5.4 Describe and identify the appearance and classification of the different neoplasia

LO6: Assist in post mortem examinations

6.1 Identify the reason of conducting post-mortem examinations

6.2 Material and equipment: use and maintenance

6.3 Follow the procedures to conduct post-mortem examination

6.4 Understand post-mortem changes

6.5 Observe and record finding and abnormalities

LEARNING STRATEGIES

1. Demonstration
2. Practical and hand to work
3. Lecture and discussion

MODULE ASSESSMENT

1. Assessment Methods

- Practical assessment by direct observation of tasks through simulation/Role-plays
- Case studies
- Written exam/test on underpinning knowledge
- questioning or interview on underpinning knowledge
- project-related conditions (real or simulated)
- Certificate from training providers or employers

2. Assessment schedule outcome

- Assessment will be conducted in each learning outcome and the trainee will attach to the enterprises for cooperative training, propose real or simulated project will be appraised at the end of the module.

3. Assessment Conditions



- The participant will have access to fully equipped work place or clinic materials, equipment necessary and consumable materials.

Assessment Criteria

LO1: Describe pathological terminologies

- Concepts of pathology is described
- Associated technical pathological terminologies are clearly identified

LO2: Identify cellular injury

- Lesions; structural and functional changes of cells in response to injurious or harmful stimuli are described
- The principal types of injuries that occur from harmful stimuli to the cells are identified
- Changes indicative of cell damage including degeneration, necrosis and extracellular accumulations of substances are identified

LO3: Identify inflammatory reactions and exudates

- Inflammatory reactions of an animal body are described
- Cardinal signs, phases and the inflammatory exudates of acute inflammation are identified and described
- Chronic inflammation and the cells involved in it are identified and described
- Clinical important inflammatory lesions including maculae, vesicle, pustule, nodule, erosion, ulcer, scab, and crust are identified and described
- The process of tissue repair and healing in an animal body is recognized

LO4: Identify pathological circulatory disorders

- Impaired blood supply to tissues (ischemia and infarction) and its causes (thrombosis, embolism and vasoconstriction) are identified and described
- The nature and characteristics of ischemia and infarctions on different organs of an animal body are identified



- Abnormal findings including hyperaemia, congestion, jaundice/icterus; related to circulatory system are identified
- The development, the causes and effects of oedema are identified and described
- Shock and the different types and causes of shock are identified

LO5: Identify disorders of cell/tissue growth

- Congenital defects of the different body systems will be clearly seen
- All adaptive changes in cells which help the cell to cope with an alteration in its environment are identified
- The common types of neoplasia occurring in animals are identified and described
- The appearance and classification of the different types of neoplasia are identified and described

LO6: Assist in post mortem examinations

- Reasons for conducting post mortem examinations are identified
- Materials and equipment are identified
- Procedures to conduct the post mortem examination is properly followed
- Post mortem changes are clearly understood
- Findings and abnormalities found are observed and recorded

RESOURCE REQUIREMENTS (Annex)

Module Code and Title: AGR AHC4 070921

Identifying Pathological Lesions, Abnormalities and Conditions

Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	<i>Learning Materials</i>			
1	Reference books	<ul style="list-style-type: none"> • General pathology books and manuals • A text book of Veterinary general 	5	1:5



		pathology		
2	Reference manuals	To be prepared by the trainer	5	1:5
3	TTLM	To be prepared by the trainer	5	1:5
4	Written and graphical illustration	To be prepared by the trainer	5	1:5
5	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer or organisation	5	1:5
6	Researches	International or national journals	5	1:5
7	Computer	DELL, acer, IBM, compaque	5	1:3
B. Learning Facilities & Infrastructure				
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concrete block (144m2 maintained regularly)	1: 25	
2.	Well-equipped Computer Room	Concrete block (100m2 maintained regularly)	1	1: 25
3	Farm	Shoat farm, dairy and beef farm, poultry farm	1	1: 25
4	Open air clinic	With 3 separate Classes	1	1: 25
5	Crush		1	1: 25
6	Quarantine posts		1	1:25
7	Well-equipped lecture room (with tables, chairs, White board)	Concrete block (64m ² maintained regularly)	1	1:25
8	Laboratory room equipped with benches and Tables	Concrete block (169 m ² maintained regularly)	1	1:25
C. Consumable Materials				
1.	Cleaning and disinfecting chemicals	<ul style="list-style-type: none"> House hold bleach Ethanol alcohol Isopropyl alcohol 	As required	



		<ul style="list-style-type: none"> Formalin Glutaraldehyde Iodophore Potassium iodide Logol's iodine Hydrogen peroxide, 		
2.	Reagents and Chemicals	<ul style="list-style-type: none"> Sodium nitrate Zinc sulphate paper 		As required
3	Drugs	<ul style="list-style-type: none"> Antibiotics Anthelmintics Antiprotozoal Antifungal Acaricides sedatives Local and general anesthesia Antidotes Tranquilizers Preservatives Luxutives 		As required
4	Gauze	Medical grade sterile cotton gauze		As required
5	Diagnosing kits	<ul style="list-style-type: none"> Mastitis kit Rose Bengal plate test kit Tuberculin (purified protein derivatives) Blotting paper 		As required
6	Cotton	Medical grade sterile cotton		As required
7	Plasters	Medical grade sterile Plaster		As required
8	Examination glove	Latex glove		As required
9	Disposable needle and syringes	Medical grade sterile		As required



		cotton gauze		
10	Daily record sheet		5	1:3
D	Tools and equipment's			
1.	Restraining materials	Bull holder, Nose ring, Rope and chains, Shackles, Insecticide impregnated collar, kennels		As required
2.	Personal protecting equipment's	Boots, hats/hard hat, overalls, gloves, protective eyewear, hearing protections, respirator or face mask, sun protection (sun hat, sun screen), and leather glove.		As required
3	Crush	<ul style="list-style-type: none"> • Bovine crush • Equine crush 	1	1:25
4	Cage	<ul style="list-style-type: none"> • Poultry cage • Miniature dog and cat cage 	5	1:5
5	Create	<ul style="list-style-type: none"> • Poultry create • Dog or cat create 	5	1:5
6	Bard parker handle	<ul style="list-style-type: none"> • BP handle No. 3 • BP handle No. 4 	5	1:5
7	Insecticide impregnated collars			As required
8	Refrigerators	Heavy duty refrigerator Cooling capacity up to - 20 ⁰ c	1	1:25
9	Ice boxes		1	1:25
10	Vaccination gun		5	1:5





LERNING MODULE 08

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Identifying and Handling Major Diseases of Ruminants, Poultry and Swine
MODULE CODE :	AGR AHC4 08 0921
NOMINAL DURATION :	90 Hours

MODULE DESCRIPTION : This module requires the application of knowledge, skills and attitude required to implement the identification and classification and handling of major diseases of Ruminants, poultry and swine. The competence requires the application of knowledge and skills to identify and monitor ruminants, poultry and swine diseases through clinical and laboratory examination, identify and apply the proper treatment, implement disease prevention and control measures.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:

LO1: Identify Hazard and risks

LO2: Identify and handle infectious disease of ruminants, poultry and swine

LO3: Identify and handle non infectious disease of Ruminants, poultry and swine

MODULE CONTENT

LO1. Identify Hazard and risks

- 1.1. Maintaining personal hygiene and cleanliness
- 1.2. Collecting and assessing information of hazard and risk control
- 1.3. Recognising and reporting hazards in the workplace
- 1.4. Recognising and taking action on risks

LO2. Identify and handle infectious disease of ruminants, poultry and swine

- 2.1. Identifying infectious diseases of ruminants, poultry and swine
- 2.2. Identifying health risks for the occurrence of animal disease
- 2.3. Undertaking diagnosis and differential diagnosis of animal diseases



- 2.4. Identifying diseases causing micro organisms
 - 2.4.1. Clinical manifestations and pathological changes
 - 2.4.2. Laboratory diagnosis
 - 2.4.3. Collecting appropriate specimen from clinically sick and dead animals
- 2.5. Prescribing and administering animal treatments
- 2.6. Identifying and implementing prevention and control methods of animal diseases
- 2.7. Identifying public and economic importance of animal disease

LO3. Identify and handle non infectious disease of Ruminants, poultry and swine

- 3.1. Identifying non- infectious diseases of ruminants, poultry and swine
- 3.2. Identifying health risks for the occurrence of animal disease
- 3.3. Carrying out prescription of animal treatments
- 3.4. Identifying and implementing prevention and control methods of animal diseases
- 3.5. Identifying economic importance of animal diseases





LEARNING METHODS:				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text 	<ul style="list-style-type: none"> • Assign sign language interpret • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe



	<ul style="list-style-type: none"> ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Present the lecture in video format • Summarize main points 		<p>impairments on their upper limbs to take note</p> <ul style="list-style-type: none"> • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the 	<ul style="list-style-type: none"> • Use sign language interpret • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs



	<ul style="list-style-type: none"> process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up Introduce the trainees with other group member 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	❖ Brief the thematic issues of the work		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpret ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpret • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration/Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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ASSESSMENT CRITERIA

LO1. Identify Hazard and risks

- Personal hygiene and cleanliness standards are maintained
- Information regarding hazard identification and risk control are collected and assessed
- Hazards in the workplace is recognized and reported
- Risks to self, bystanders, the public and animals are recognized and action taken

LO2. Identify and handle infectious disease of ruminants, poultry and swine

- Infectious diseases of ruminants, poultry and swine is Identified
- Health risks for the occurrence of animal disease is identified
- Diagnosis and differential diagnosis of animal diseases is undertaken
- Disease causing micro organisms are identified by clinical signs and laboratory diagnosis
- Animal treatments are prescribed and administered
- Prevention and control methods for animal diseases are identified and implemented
- Public and economic importance of animal disease is identified

LO3. Identify and handle non infectious disease of Ruminants, poultry and swine

- Non- infectious diseases of ruminants, poultry and swine are identified
- Health risks for the occurrence of animal disease is identified
- Animal treatments are prescribed and carried out
- Prevention and control methods for animal diseases are identified and implemented
- Economic importance of animal diseases are identified



Annex: Resource Requirements

Module Code and Title: AGR AHC4M08 0921 Identifying and Handling Major Diseases of Ruminants, Poultry and Swine				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	To be prepared by trainer	25	1:1
2.	Textbooks	<ul style="list-style-type: none"> • Merk veterinary manual 8th edition • Veterinary Medicine A textbook of the diseases of cattle, Horses, sheep, pigs and goats, Radostits <i>et al</i>, 2006, 10thed. • Bovine Medicine: Diseases and Husbandry of Cattle, Andrews <i>et al</i>.(2004)2nd • Clinical Examination of Farm Animals, Jackson and Cockcroft, Blackwell Publ. (2002)1st Ed. • Dairy production medicine, Carlos <i>et al</i>, (2011) 1st Ed. • Infectious Disease of Livestock, Coetzer and Tustin. Volume one, Oxford University press, (2004) 2nd Ed. 	5	1:5



3.	Reference manuals	Prepared by trainer or organization	5	1:5
4.	Journals/Publication/Magazines	International or national journals to be download from free webs	1	1:25
5.	Computer	DELL, acer, IBM, compaque	5	1:5
6.	Different animation and graphics, soft wares	to be download from free webs	1	1:25
B.	Learning Facilities & Infrastructure			
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Standard	1	1:25
2.	White and black board	Standard	1each	1:25
3.	Veterinary clinic	Standard	1	1:25
4.	Veterinary laboratory	Standard	1	1:25
5.	Crush	Made up of metal or wood	1	1:25
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5



3.	Pen	Ball point	5	1:5
4	Chalk	Standard		As required
5	Reagents	<ul style="list-style-type: none"> • Staining chemicals (Giemsa stain, gram stain, Iodine, Gram Violate, methylene blue, malachite green, carbolfuction, absolute methanol) • Logol's iodine • Hydrogen peroxide • Heamatoxiline, • Phenol red • Methyl red 		As required
6	Gauze	Medical grade sterile cotton gauze	5 roll	As required
7	Cover slips	Packed		As required
8	Nasal Swabs	Packed		As required
9	Microscopic Slides	Packed		As required
10	Alcohol 78%	Standard		As required
9	Savlon 70% and 90%	Standard		As required
10	Lubricant	Standard		As required



D.	Tools and Equipments			
1.	Stethoscope	Standard	5	1:5
2.	Thermometer	<ul style="list-style-type: none"> Clinical Digital 	5 5	1:5 each
3	Treatment syringe	Disposable syringe 1ml, 3ml, 5ml, 10ml and 20ml Re-usable syringe 10ml and 20ml	1 pack each in ml	As required
4	Automatic vaccination syringe	Standard	5	1:5
5	Needle	16 gauge 18 gauge 22 gauge	5 5 5	As required
6	Hammer and pleximeter	Standard	5	1:5
7	Stomach tube	Plastic	5	1:5
E	Personal Protective Equipments			
1	Face mask	Standard	25	1:1
2	Gown	Standard	25	1:1
3	Glove	<ul style="list-style-type: none"> Examination glove Surgical glove Arm length glove 	2 pack 1 pack 1 pack	As required
4	Overalls	Standard	25	1:1
5	Boot	Standard	25	1:1
6	Head protection	Standard	25	1:1



LEARNING MODULE 09	
TVET-PROGRAM TITLE: Animal Health Care Service, Level IV	
MODULE TITLE: Identifying and Handling Major Diseases of Equines and Swine	
MODULE CODE: AGR AHC4 09 2021	
NOMINAL DURATION: 60 Hours	
MODULE DESCRIPTION: This aims to provide the knowledge, skills and attitude required to implement the identification and classification and handling of major diseases of equines and swine. This module also requires the application of knowledge and skills to identify and monitor equine and camel diseases through clinical and laboratory examination, identify and apply the proper treatment, implement disease prevention and control measures.	
LEARNING OUTCOMES At the end of the lesson the trainee will be able to know: LO1: Identify Hazard and risks LO2: Identify and handle infectious disease of Equine and Camels LO3: Identify and handle non-infectious disease of Equine and Camels	
MODULE CONTENTS: LO1: Identify Hazard and risks 1.1 Follow OHS Procedures 1.1.1 Personal protective equipment's uses 1.1.2 Veterinary sanitation and personal hygiene: use and maintain 1.2 Collect information on hazard identification and risk assessment 1.2.1 Identify the types and sources of hazard in equine and swine clinics 1.2.2 Risk assessment and control 1.3 Recognize and report hazards in the workplace 1.3.1 Recognizing zoonoses, Chemical spillage, Animal bites, envenomation, kicks, scratches and crush injuries, Biological hazardous waste and sharps disposal, 1.3.2 Handling of chemicals and medicines,	



1.3.3 Gas leakage, Inhalation of aerosol particles, Intraocular contamination, Manual handling, including carrying, lifting and shifting

1.3.4 Needle pricks and cuts from other sharps, Release of infective agents (animal and human), Slippery or uneven work surfaces.

1.4 Recognize and take action risks to self, bystanders, the public and animals

LO2: Identify and handle infectious disease of Equine and Camels

2.1 Identify infectious diseases of equines and camel caused by micro-organisms

2.1.1 Etiology

2.1.2 Occurrence

2.1.3 Clinical sign and symptoms

2.1.4 Mode of transmission

2.1.5 Laboratory

2.1.6 Treatment

2.1.7 Post mortem findings

2.1.8 Post-treatment advice

2.1.9 Control and elimination

2.2 Identify Animal health risks for the occurrence of broad group of diseases or specific diseases

2.2.1 Presence of marshy area

2.2.2 Drought

2.2.3 Transmitting vectors

2.2.4 Absence of quality feeds and water

2.2.5 Stock density

2.2.6 Exposure of the animal to pathogens

2.2.7 Species and breeds of the animal

2.3 Undertake the diagnosis of animal diseases and their differentiation by pathognomics



signs

2.4 Identify diseases causing micro-organisms based on

2.4.1 Clinical signs, Pathological changes, Laboratory analysis, collecting appropriate specimen from clinically sick and dead animals for specific suspected diseases

2.5 Prescribe and administer as required and under supervision animal treatments

2.6 Identify and implement diseases prevention and control methods

2.6.1 Prophylactic (vaccines or other preventive drugs) or therapeutic treatment, culling of the animal, test and slaughter, isolation, sanitation, quarantine, movement control, burying or incineration.

2.6.2 Improve animal feeding, housing and handling managements

2.6.3 Pasture and grazing management

2.7 Identify and advice public and economic importance of diseases

2.7.1 Zoonotic importance

2.7.2 High animal mortality

2.7.3 Loss of production performance

2.7.4 Cost of treatment and control

2.7.5 International trade ban

LO3: Identify and handle non-infectious disease of Equine and Camels

3.1 Identify non- infectious diseases of equine and camel

3.2 Identify an occurrences of animal health risks

3.3 Carry out prescribed animal treatments as required and under supervision

3.4 Identify and implement prevention and control methods of target diseases

3.5 Identify and advice an economic importance of the diseases

3.5.1 Implement an appropriate prevention and control programs

LEARNING STRATEGIES

1. Demonstration

2. Practical and hand to work



3. Lecture and discussion

MODULE ASSESSMENT

1. Assessment Methods

- Practical assessment by direct observation of tasks through simulation/Role-plays
- Case studies
- Written exam/test on underpinning knowledge
- questioning or interview on underpinning knowledge
- project-related conditions (real or simulated)
- Certificate from training providers or employers

2. Assessment schedule outcome

- Assessment will be conducted in each learning outcome and the trainee will attach to the enterprises for cooperative training, propose real or simulated project will be appraised at the end of the module.

3. Assessment Conditions

- The participant will have access to fully equipped work place or clinic materials, equipment necessary and consumable materials.

Assessment Criteria

LO1: Identify Hazard and risks

- Personal hygiene and cleanliness standards are maintained in accordance with OHS procedures and organisational guidelines and procedures.
- Information regarding hazard identification and risk control is collected and assessed following the enterprise requirements.
- Hazards in the workplace are recognised and reported to the supervisor.
- Risks to self, bystanders, the public and animals are recognised and action is taken according to the enterprise guide lines.



LO2: Identify and handle infectious disease of Equine and Camels

- Infectious diseases of equines and camel caused by microorganisms are identified based on their occurrence, clinical sign and symptoms, mode of transmission, laboratory and post mortem findings; and are handled according to the organizational guideline.
- Animal health risks are identified for the occurrence of broad group of diseases or specific diseases.
- Diagnosis of animal diseases and their differentiation from other diseases with similar character are undertaken according to the enterprise guide lines.
- Diseases causing microorganisms are identified by their clinical symptoms, pathological changes and through laboratory diagnosis; by collecting appropriate specimen from clinically sick and dead animals for specific suspected diseases according the laboratory requirements.
- Animal treatments are prescribed and administered as required, under supervision, according to manufacturer's instruction, enterprise protocol and the national treatment guideline.
- Prevention and control methods for each of the diseases are identified and implemented according to the enterprise guideline.
- Public and economic importance of the diseases are identified and advice is given and appropriate prevention and control programs are implemented as required under supervision of a veterinarian.

LO3: Identify and handle non-infectious disease of Equine and Camels

- Non Infectious diseases of equine and camel are identified based on their occurrence, clinical sign and symptoms, laboratory and post mortem findings; and are handled according to the national and organizational guideline.
- Animal health risks are identified for the occurrence of broad group of diseases or specific diseases are identified.



- Prescribed animal treatments are carried out as required, under supervision, according to manufacturer's instruction and enterprise protocol.
- Prevention and control methods for each of the diseases are identified and implemented according to the enterprise guideline.
- Economic importance's of the diseases are identified and advice is given and appropriate prevention and control programs are implemented as required under supervision.



RESOURCE REQUIREMENTS (Annex)				
Module Code and Title: AGR AHC4 M090921				
Identifying and Handling Major Diseases of Equines and Swine				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	Reference books	• Equine clinic and veterinary general animal health	5	1:5
2	Reference manuals	ILRI manuals and researches, EVA journals	5	1:5
3	TTLM	Prepared by the trainer	5	1:5
4	Written and graphical illustration	To be prepared by the trainer	5	1:5
5	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer or organisation	5	1:5
6	Researches	International or national journals	5	1:5
7	Computer	DELL, acer, IBM, compaque	5	1:5
B. Learning Facilities & Infrastructure				
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concrete block (144m2 maintained regularly)	1	1:25
2.	Well-equipped Computer Room	Concrete block (100m2 maintained regularly)	1	1:25
3	Farm	Equine farm, swine farm	1	1:25
4	Open air clinic		1	1:25
5	Abattoir (cooperative training)	Swine abattoir	1	1:25
6	Anatomic models	Equine and swine	1	1:25



		model		
7	Well-equipped lecture room (with tables, chairs, White board)	Concrete block (64m ² maintained regularly)	1	1:25
8	Embryological model Organ Model		1	1:25
9	Laboratory room	Concrete block (169 m ² maintained regularly)	1	1:25
C. Consumable Materials				
1.	Cleaning and disinfecting chemicals	<ul style="list-style-type: none"> • House hold bleach • Ethanol alcohol • Isopropyl alcohol • Formalin • Glutaraldehyde • Iodophore • Potassium iodide • Logol's iodine • Hydrogen peroxide, 		As required
2.	Reagents and Chemicals	<ul style="list-style-type: none"> • Sodium nitrate • Zinc sulphate paper 		As required
3	Drugs	<ul style="list-style-type: none"> • Antibiotics • Anthelmintics • Antiprotozoal • Antifungal • Acaricides • Sedatives • Local and general anesthesia • Antidotes • Tranquilizers • Preservatives • Luxutives 		As required
4	Gauze	Medical grade sterile cotton gauze		As required
5	Permanent record sheet		5	1:5



6	Surgical glove	Medical grade sterile cotton gauze		As required
7	Sample collection plastic bottles	Standard size		As required
8	Disposable syringes and needles	<ul style="list-style-type: none"> • 3ml syringe • 5ml • 10ml • 20ml 		As required
9	Diagnosing kits	<ul style="list-style-type: none"> • Mastitis kit • Rose Bengal plate test kit • Tuberculin (purified protein derivatives) • Blotting paper 		As required
10	Scalpel	Blade number: 11-25		As required
11	Cotton	Medical grade sterile cotton		As required
12	Plasters	Medical grade sterile Plaster		As required
13	Examination glove	Latex glove		As required
14	Stationary equipment			As required
D Tools and equipment's				
1.	Restraining materials	<ul style="list-style-type: none"> • Nose twitch • Rope and chains • Shackles • Insecticide • impregnated collar • kennels 		As required



2.	Personal protecting equipment	Boots, hats/hard hat, overalls, gloves, protective eyewear, hearing protections, respirator or face mask, sun protection (sun hat, sun screen), and leather glove.		As required
3	Crush	<ul style="list-style-type: none"> • swine crush • Equine crush 	1	1:25
4	Cage	<ul style="list-style-type: none"> • Swine cage 	5	1:5
5	Stethoscope	Standard size	1	1:1
6	Plastic needle	Standard size	1	1:1
7	Nose twitch	Standard size		As required
8	Rope and chains	Standard size		As required
9	Bijoux bottle	Standard size		As required
10	Vacutainer tube	<ul style="list-style-type: none"> • Plain • Heparinized • EDTA coated • Sodium citrate coated 		As required
11	Vacutainer needle Holder	Standard	5	1:5
12	Bard parker handle	<ul style="list-style-type: none"> • BP handle No. 3 • BP handle No. 4 	5	1:5
13	Surgical kit			As required
14	Refrigerators	Heavy duty refrigerator Cooling capacity up to - 20°C	1	1:5
15	Ice boxes		1	1:25
16	Vaccination gun		1	1:25
17	Microscope	• Compound	5	1:5
		• Stereo microscope	25	1:5



LERNING MODULE GUIDE 10			
TVET-PROGRAMME TITLE:		Animal Health Care Service Level 4	
MODULE TITLE:		Identifying and Handling Diseases of Companion Animals	
MODULE CODE :		AGR AHCS410 09 21	
NOMINAL DURATION :		50 Hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to implement the identification and classification, and handling of major diseases of Dogs and cats. The unit requires the application of knowledge and skills to identify and monitor Dogs and cats diseases through clinical and laboratory examination, identify and apply the proper treatment, implement disease prevention and control measures.			
LEARNING OUTCOMES			
At the end of the module the learner will be able to:			
LO1 Identify Hazard and risks			
LO2 .Identify and handle infectious disease of Dogs and Cats			
LO3 Identify and handle non-infectious disease of Dogs and Cats			
LO4 Complete the post-mortem examination			
LO5 Develop knowledge of public health issues associated with food of animal origin			
MODULE CONTENT			
LO1: Identify Hazard and Risks			
1.1. Maintaining personal hygiene and cleanliness in accordance with OHSprocedures			
1.2. Collecting and assessing information regarding hazard identificationand risk control			
1.3. Recognizingand reporting hazards in the workplace			
1.3.1. Zoonoses			
1.3.2. Handling of chemicals and medicines			
1.3.3. Animal bites, scratches and crush injuries			
1.3.4. Biological hazardous wastes			
1.3.5. Inhalation of aerosol particles			
1.3.6. Intraocular contamination			
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1.3.7. Manual handling

1.4. Recognizing and taking action of risks to self, bystanders, the public and animals

L02: Identify and Handle Infectious Disease of Dogs and Cats

2.1. Identifying infectious diseases of dogs and cats

2.1.1. Bacterial diseases

2.1.2. Viral diseases

2.1.3. Fungal diseases

2.1.4. Zoonotic diseases

2.2. Identifying animal health risks for the occurrence of broad group of diseases

2.3. Undertaking diagnosis of animal diseases and their differentiation from other diseases

2.4. Identifying diseases causing micro-organisms through laboratory diagnosis

2.5. Prescribing and administering animal treatments as required

2.6. Identifying and implementing prevention and control methods for each of the diseases

2.7. Identifying and giving advice to public and economic importance of the diseases

L03: Identify and Handle Non-infectious Disease of Dogs and Cats

3.1. Identifying non-infectious diseases of dogs and cats

3.1.1. Allergies

3.1.2. Chemical toxicities

3.1.3. Genetic

3.1.4. Metabolic

3.1.5. Nutritional

3.1.6. Neoplastic and Physical traumas

3.2. Recognizing animal health risks for the occurrence of broad group of diseases

3.3. Carrying out prescribing animal treatments as required

3.4. Identifying and implementing prevention and control methods

3.4.1. The local climatic and agro ecological conditions

3.4.2. Concepts of prevention and control of diseases



- 3.4.2.1. Prophylactic (vaccines or other preventive drugs)
- 3.4.2.2. Therapeutic treatment
- 3.4.2.3. Isolation
- 3.4.2.4. Sanitation
- 3.4.2.5. Quarantine
- 3.4.2.6. Movement control
- 3.4.2.7. Burying or incineration of dead body
- 3.4.2.8. Improve animal feeding,
- 3.4.2.9. Housing and handling managements
- 3.5. Identifying and giving advice on economic importance of the diseases and prevention and control programs



LEARNING METHODS:

For None ImairedTrainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture- discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<ul style="list-style-type: none"> • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 			on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up



				<ul style="list-style-type: none"> • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



	process		process/ practical training	
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the 	<ul style="list-style-type: none"> • Speak loudly • Using sign 	<ul style="list-style-type: none"> • Use written response as an



		<p>proper communication was conducted with the trainee through the service of the sign language interpreter</p> <ul style="list-style-type: none"> • Use short and clear questioning • Time extension 	language interpreter if necessary	option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration /Observation	<ul style="list-style-type: none"> • Brief the instruction or provide them in large text/Brail • Time extension 	<ul style="list-style-type: none"> • Use sign language interpreter • Brief on the instruction of the exam • Provide activity-based/ practical assessment method • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Brief on the instruction of the exam • Use loud voice • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Conduct close follow up • Time extension
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ASSESSMENT CRITERIA

LO1 Identify **Hazard and Risks**

- Personal hygiene and cleanliness standards are maintained in accordance with OHS procedures and organizational guidelines and procedures.
- Information regarding hazard identification and risk control is collected and assessed following the enterprise requirements.
- Hazards in the workplace are recognized and reported to the supervisor.
- Risks to self, bystanders, the public and animals are recognized and action is taken according to the enterprise guide lines.

LO2 .Identify and Handle Infectious Disease of Dogs and Cats

- Infectious diseases of dogs and cats caused by micro-organisms are identified based on their occurrence, clinical sign and symptoms, mode of transmission, laboratory and post mortem findings; and are handled according to the organizational guideline.
- Animal health risks are identified for the occurrence of broad group of diseases or specific diseases.
- Diagnosis of animal diseases and their differentiation from other diseases with similar character are undertaken according to the enterprise guide lines.
- Diseases causing micro-organisms are identified by their clinical symptoms, pathological changes and through laboratory diagnosis; by appropriate specimen from clinically sick and dead animals for specific suspected diseases according the laboratory requirements.
- Animal treatments are prescribed and administered as required, under supervision, according to manufacturer's instruction, enterprise protocol and the national treatment guideline.

Prevention and control methods for each of the diseases are identified and implemented according to the enterprise guideline.
- Public and economic importance of the diseases are identified and advice is



given and appropriate prevention and control programs are implemented as required under supervision of a veterinarian.

- Economic importance of the diseases are identified and advice is given and appropriate prevention and control programs are implemented as required under supervision.



Annex Resource Requirements

AGR AHCS4M10 09 21: Identifying and Handle Diseases of Companion Animals				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Books	<ul style="list-style-type: none"> • Small animal internal Medicine 6thed. • Small animal differential diagnosis 3rded. • Pocket Handbook on small animal medicine 1st ed. 		
3.	Manuals			
4.	Journals/Magazines		25	1:1
5.	Open air clinic	Standard	1	
6.	Laboratory room equipped with benches and tables	Standard	1	
7.	Crush	Dog crush (standard)	1	
B.	Learning Facilities & Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Work station	Equipped with household facility and	1	1:25



		hand wash basin Standard		
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4.	Marker	Pack	1	
5.	Filip chart	Pack	1	
4.	Chalk	Pack	1	
5.	Disposable syringe	Pack (5ml)	1	
5.	Disposable syringe	Pack (10ml)	1	
6.	Slide and cover slips	Pack	1 each	
7.	Swabs	Pack	1	
D.	Personal Protective Equipments			
1.	Glove	Pack	1	
2.	Savlon	Lit	1	
3.	Alcohol	Lit	1	
5.	Arm length glove	Pack	1	
6.	Detergents			As required
7.	Gown	Standard	26	1:1
E	Different types of vaccines and drugs			
1.	Different type of vaccine	Dose		As required
2.	Antibiotic drugs			As required
3.	Anthelmintic drugs			As required
4.	Antifungal drugs			As required
5.	Antiprotozoal drugs			As required
D.	Tools and Equipments			



1.	Mortar and pestle	Standard As required Baerman apparatus	2	
2.	Fecal centrifuge	Manual Electrical	1 each	
3.	McMaster slide	Standard	4	
4.	Haemocytometer	Standard	2	
5.	Hematocrit centrifuge with reader	Standard	1	
6.	Microscope	Compound Stereo microscope	3 each	
7.	Syringe	Manual syringe	6	
		Automatic syringe	5	
8.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
9.	Duster	Standard	1	
10.	Laptop	Ram 2, hard disk 500 GB	1	1:25
11.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
12.	Telephone	Standard	5	1:5
13.	Blackboard	Standard	1	1:25
14.	Brail	Standard	25	1:1
15..	Audio-video		1	1:25
5.	Pipettes	Micro pipette (Unichannel or 8 channel)		
		5ml pipettes		
		10ml pipettes		
		20ml pipettes		
		50ml pipettes		
7.	Rope and chains			As required



8.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
9.	Duster	Standard	1	
10.	Laptop	Ram 2, hard disk 500 GB	1	1:25
11.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
12.	Telephone	Standard	5	1:5
13.	Blackboard	Standard	1	1:25
14.	Brail	Standard	25	1:1
15..	Audio-video	Standard	1	1:25



LEARNING MODULE 11

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Identifying and Handling Diseases of Wild Animals
MODULE CODE :	AGR AHC4 11 0921
NOMINAL DURATION :	60 Hours

MODULE DESCRIPTION : This module aims to provide the trainees with the basic knowledge and skills required to implement the identification, classification, and handling of major diseases of wild animals in the country.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:

LO1: Identify Hazard and risks

LO2: Identify and handle major infectious disease of wild animals

LO3: Identify and handle non-infectious disease of wild animals

MODULE CONTENT

LO1. Identify Hazard and risks

- 1.1. Maintaining personal hygiene and cleanliness standards according to OHS procedure
- 1.2. Collecting and assessing information regarding hazard identification and risk control
- 1.3. Recognising and reporting hazards in the workplace
- 1.4. Recognising and taking action on risks to self, bystanders, the public and animals

LO2. Identify and handle major infectious disease of wild animals

- 2.1. Identifying major infectious diseases of wild animals
- 2.2. Capturing, restraining and handling of wild animals
- 2.3. Signs of stress in wild animals
- 2.4. Undertaking diagnosis of wild animal disease
- 2.5. Identifying diseases causing micro organisms



2.5.1. Clinical manifestations and pathological changes

2.5.2. Laboratory diagnosis

2.5.3. Collecting appropriate specimen from clinically sick and dead animals

2.6. Prescribing and carrying out wild animal treatments

2.7. Identifying prevention and control methods of wild animal disease

2.8. Identifying public and economic importance of wild animal diseases

2.8.1. Implementing appropriate wild animal disease prevention and control programs

LO3. Identify and handle non-infectious disease of wild animals

3.1. Identifying common non-infectious diseases of wild animals

3.2. Identifying treatments for wild animal diseases

3.3. Identifying prevention and control methods of wild animal diseases

3.4. Identifying economic importance of wild animal diseases

3.4.1. Implementing appropriate wild animal disease prevention and control programs



LEARNING METHODS:				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text 	<ul style="list-style-type: none"> • Assign sign language interpret • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe



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	<ul style="list-style-type: none"> process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<p>trainees</p> <ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<p>impairment to operate equipments/ machines</p> <ul style="list-style-type: none"> Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up Introduce the trainees with other group member 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	❖ Brief the thematic issues of the work		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpret ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpret • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration/Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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ASSESSMENT CRITERIA

LO1. Identify Hazard and risks

- Personal hygiene and cleanliness standards is maintained according to OHS procedures
- Information regarding hazard identification and risk control is assessed
- Hazards in the workplace is recognized and reported according to enterprise guideline
- Risks to self, bystanders, the public and animals is recognized and action taken

LO2. Identify and handle major infectious disease of wild animals

- Major infectious diseases caused by microorganisms of wild animals are identified
- Wild animals are captured, restrained and handled for diagnosis and treatment of disease
- Signs of stress in wild animals is identified and awareness created
- Diagnosis of wild animal disease are undertaken
- Diseases causing microorganisms are identified by clinical manifestations, pathological changes, laboratory diagnosis and collecting appropriate specimen from clinically sick and dead animals
- Wild animal treatments are prescribed and carried out
- Wild animal disease prevention and control methods are identified
- Public and economic importance of wild animal diseases is identified and implemented

LO3. Identify and handle non-infectious disease of wild animals

- Common non-infectious diseases of wild animals are identified
- Treatments for wild animal diseases are identified
- Prevention and control methods of wild animal diseases identified
- Public and economic importance of wild animal diseases is identified and implemented





Annexes: Resources requirements

Module Code and Title: AGR AHC4M11 0921 Identifying and Handling Diseases of Wild Animals				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	To be prepared by trainer	25	1:1
2.	Textbooks	<ul style="list-style-type: none"> • Merk veterinary manual 8th edition • Parasitic disease of wild mammals, Samuel et al 2nd Ed. (2004) • Restraint and Handling of Wild and Domestic Animals, Murray Fowler, (2008) 3rd Ed. 	5	1:5
3.	Reference manuals	Prepared by trainer	5	1:5
4.	Journals/Publication/Magazines	International or national journals to be download from free webs	1	1:25
5.	Computer	DELL, acer, IBM, compaque	5	1:5
6.	Different animation	to be download from free webs	1	1:25



	and graphics, soft wares			
B.	Learning Facilities & Infrastructure			
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Standards	1	1:25
2	White and black board	Standard	1 each	1:25
3.	Veterinary clinic	Standard	1	
4.	Veterinary laboratory	Standard	1	
5.	Crush	Made up of metal or wood	1	
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4	Chalk	Standard		As required
5	Reagents	<ul style="list-style-type: none"> Staining chemicals (Giemsa stain, gram stain, Iodine, Gram Violate, methylene blue, malachite green, carbolfuction, absolute methanol) Logol's iodine Hydrogen peroxide Heamatoxiline, Phenol red 		As required



		• Methyl red		
6	Gauze	Medical grade sterile cotton gauze	5 roll	As required
7	Cover slips	Packed		As required
8	Nasal Swabs	Packed		As required
9	Microscopic Slides	Packed		As required
10	Alcohol 78%	Standard	5 litre	1:5
11	Savlon 70% and 90%	Standard	5 litre	1:5
12	Lubricant	Standard	1 litre	1: 25
D.	Tools and Equipments			
1.	Stethoscope	Standard	5	1:5
2.	Thermometer	<ul style="list-style-type: none"> Clinical Digital 	5 5	1:5 each
3	Treatment syringe	Disposable syringe 1ml, 3ml, 5ml, 10ml and 20ml Re-usable syringe 10ml and 20ml	1 pack each ml	As required
4	Automatic vaccination syringe	Standard	5	1:5
5	Needle	16 gauge 18 gauge	5 5	As required



		22 gauge	5	
6	Hammer and pleximeter	Standard	5	1:5
E	Personal protective Equipments			
1	Face mask	Standard	25	1:1
2	Gown	White colour	25	1:1
3	Glove	<ul style="list-style-type: none"> • Examination glove • Surgical glove • Arm length glove 	2 pack 1 pack 1 pack	As required
4	Overalls	Standard	25	1:1
5	Boot	Standard	25	1:1







LEARNING MODULE 12	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Controlling Trans-boundary Animal Diseases with Others in the Animal Care Industry
MODULE CODE :	AGR AHC4 12 0921
NOMINAL DURATION :	60Hours
MODULE DESCRIPTION : This module requires the application of knowledge, skills and attitude required to control and prevent trans-boundary animal diseases with others in the animal care industry. It requires the ability to identify major Trans-boundary animal diseases, their impacts (both public and animals), identify control and eradication methods, participate in the control and eradication of Trans-boundary animal diseases, participate in the agreed preparedness measures and participate in the emergency animal health campaign.	
LEARNING OUTCOMES At the end of the lesson the trainee will be able to know: LO1: Follow OHS procedure LO2: Identify major Trans-boundary animal diseases and their impact in the region LO3: Participate in the agreed control and eradication of Trans boundary animal diseases LO4: Record and reporting TADs	
MODULE CONTENT LO1.Follow OHS procedure 1.1. Recognizing and reporting risks in handling and using of veterinary drugs 1.2. Following Safe work practices 1.3. Using, maintaining and storing PPE clothing and equipment 1.4. Implementing OHS procedures with the country's disease prevention and control strategies 1.5. Disposing off wastes in line with environmental health policies and legislations	



LO2. Identify major Trans-boundary animal diseases and their impact in the region

- 2.1. Identifying major trans-boundary animal diseases
- 2.2. Recognizing means of transmission of TADs
- 2.3. Recognizing public and economic importance of trans-boundary animal diseases in the country

LO3. Participate in the agreed control and eradication of Trans boundary animal diseases

- 3.1. Recognizing and reporting risks in handling TADs
- 3.2. Following safe work practices
- 3.3. Using, maintaining and storing PPE clothing and equipment
- 3.4. Identifying and applying trans-boundary animals diseases control and eradication methods
- 3.5. Undertaking Surveillance for TADs
- 3.6. Checking health record and certificate for animal movement
- 3.7. Quarantining and inspecting exit and entry point animals

LO4. Record and reporting TADs

- 4.1. Recording and reporting the incidence of TADs
- 4.2. Recording and reporting unidentified disease incidence



LEARNING METHODS:				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text 	<ul style="list-style-type: none"> • Assign sign language interpret • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe



	<ul style="list-style-type: none"> ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Present the lecture in video format • Summarize main points 		<p>impairments on their upper limbs to take note</p> <ul style="list-style-type: none"> • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the 	<ul style="list-style-type: none"> • Use sign language interpret • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs



	<ul style="list-style-type: none"> process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up Introduce the trainees with other group member 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	❖ Brief the thematic issues of the work		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpret ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpret • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration/Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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ASSESSMENT CRITERIA

LO1.Follow OHS procedure

- Risks in handle and use of veterinary drugs are recognized and reported
- Safe work practice is followed according to OHS procedure
- PPE cloth and equipments are used, maintained and stored
- OHS procedures are Implemented with the country's disease prevention and control strategies
- Wastes are disposed off in line with environmental health policies and legislations

LO2. Identify major Trans-boundary animal diseases and their impact in the region

- Major trans-boundary animal diseases are identified
- Means of transmission of TADs are recognized
- Public and economic importance of trans-boundary animal diseases in the country is recognized

LO3. Participate in the agreed control and eradication of Trans boundary animal diseases

- Risks in handling TADs are recognized and reported
- Safe work practices are followed accurately
- PPE cloth and equipment are used, maintained and stored appropriately
- Trans-boundary animals diseases control and eradication methods are identified and applied
- Surveillance for TADs is undertaken
- Health Record and Certificate for animal movement is Checked
- Exit and entry point animals is quarantined and inspected

LO4. Record and reporting TADs

- The incidence of TADs recorded and reported
- Unidentified disease incidence are recorded and reported



Annex: Resource Requirements

Module Code and Title: AGR AHC4 12 0921Controlling Trans-boundary Animal Diseases with Others in the Animal Care Industry				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM	Prepared by the trainer	25	1:1
2	Textbook	<ul style="list-style-type: none"> • Veterinary epidemiology.3rded 2008. Thrust field. • Trans-boundary and Emerging Disease of Animals, First Edition, 2016 • Major Trans-boundary Disease of Ruminants and their Economic Effect in Ethiopia, 2017 • Text book of veterinary physiology, J.G. Cunningham 2008 • Anatomy and physiology of farm animals. 7thed. 2009. 	5 each	1:5
3	Reference book and Journal	<ul style="list-style-type: none"> • International or national journals 	5	1:5
4	Computer	DELL, Lenovo, Acer	12	1:2
B.	Learning Facilities & Infrastructure			



1	Lecture room/work shop multimedia equipment(LCD project, Television, software and CD)	Standard	1	1:25
2	Library	Standard	1	1:25
3	Well equipped Computer Room	Standard	1	1:25
4	Laboratory room	Standard	1	1:25
5	White and black board	Standard	1 each	1:25
C.	Consumable Materials			
1	Paper	A4 size	5 rim	1:5
2	Pen	Lexi	5 pack	5:1
3	Chalk	Standard		As required
4	Cleaning and disinfecting chemicals	<ul style="list-style-type: none"> Ethanol alcohol Isopropyl alcohol Formaline, Glutaraldehyde Iodophore Potassium iodide Logol's iodine Hydrogen peroxide 		As required
5	Drugs	<ul style="list-style-type: none"> Antibiotics Antihelmentics Antiprotozoal Antifungal Acaricides Sedatives Local and general anesthesia Antidotes Tranquilizers Preservatives 		As required



6	Soap	B29, Ajax		1:5
7	Surgical glove	Medical grade sterile and packed glove		As required
8	Examination glove	Medical grade sterile and packed glove		As required
9	Sample collection plastic bottles	Standard size		As required
10	Disposable syringes and needles	<ul style="list-style-type: none"> • 3ml syringe • 5ml • 10ml • 20ml 		As required
11	Cotton	Medical grade sterile Cotton		As required
12	Gauze	Medical grade sterile cotton gauze		As required
11	Vacutainer needle	Standard		As required
D	Tools and equipments			
1	Microscope	<ul style="list-style-type: none"> • light microscope with magnification (4x times 10x and 100x) • stereo microscope with magnification (4x times 10x and 100x) 	5 each	1:5 each respectively
2	Mortar & pistol	Made of stainless steel With 90 mm	2	1:12



3	Stethoscope	Standard	12	1:2
4	Thermometer	<ul style="list-style-type: none"> clinical thermometer digital thermometer 	4 each	1:3
5	Autoclave	Barnstead C57835 - Aquafin Used Barnstead Thermolyne C57835 Bench - Top Sterilizer Autoclave. temperature range: 100 - 135°C, average cycle: 35 minutes; chamber dimensions: 10 x 15.5, reservoir capacity	1	1:25
6	Dry heat oven	<ul style="list-style-type: none"> Ac current supply 120V On Off and mode to adjust working temperature Power 450 W With two trays 	1	1:25
7	Autoclave	Barnstead C57835 : - Aquafin Used Barnstead Thermolyne C57835 Bench - Top Sterilizer Autoclave. temperature range: 100 - 135°C, average cycle: 35 minutes; chamber dimensions: 10 x 15.5, reservoir capacity	1	1:25
8	Dry heat oven	<ul style="list-style-type: none"> Ac current supply 120V On Off and mode to adjust working temperature Power 450 W With two trays 	1	1:25
9	Crush	Made up of wood or metal	1	1:25
10	Hammer and pleximeter	Standard	5	1:5
11	Bull holder	Standard size	5	1:5
12	Mouth gag	Standard	5	1:5



13	Vacutanier tube	<ul style="list-style-type: none"> • Plain • Heparinized • EDTA coated • Sodium citrate coated 		As required
E	Personal protecting Equipment			
1	Gloves	Standard		As required
2	Hearing protections	Standard		As required
3	Overalls	Standard	25	1:1
4	Eye protection	Standard		As required
5	Respirator or face mask	Standard		As required



LEARNING MODULE GUIDE 13

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Conducting Basic Laboratory Techniques and Procedures
MODULE CODE :	AGR AHC4 13 0921
NOMINAL DURATION :	90 Hours
MODULE DESCRIPTION : This module requires the application of knowledge, skills and attitude required to carry out processing laboratory specimen for test and performing basic laboratory tests. The work functions within this unit require the demonstration of relevant theoretical knowledge and skill to conduct preparation and processing of lab specimen, to conduct basic staining tests, microscopic examination and analysis and reporting of results.	
LEARNING OUTCOMES At the end of the lesson the trainee will be able to know: LO1: Follow OHS practices and Assist in work place hazard Identification and risk control LO2: Prepare material and equipment and process sample for test LO3: Conduct basic laboratory procedures	
MODULE CONTENT LO1. Follow OHS practices and Assist in work place hazard Identification and risk control 1.1. Maintaining personal hygiene and cleanliness standards according to OHS procedure 1.2. Collecting specimens from domestic animals 1.3. Handling specimens to minimise the spread of pathogens 1.4. Recognising and reporting Hazards in the workplace 1.5. Following workplace procedures and work instructions 1.6. Recognizing and taking action to eliminate risks to self, bystanders, the public and animals	



1.7. Providing Safety training

LO2. Prepare material and equipment and process sample for test

- 2.1. Testing equipment and materials set up according to organisational guidelines
- 2.2. Performing pre-use and safety checks of materials and equipments
- 2.3. Identifying and reporting faulty or unsafe equipment to appropriate personnel
- 2.4. Checking calibration status of equipment and any out of calibration items
- 2.5. Recording and comparing sample description with specification, and any discrepancies
- 2.6. Preparing samples accordance with appropriate standard methods
- 2.7. Identifying, preparing and measuring samples to the standard taste

LO3. Conduct basic laboratory procedures

- 3.1. Conducting basic laboratory tests for identification of microbial infections
- 3.2. Conducting basic laboratory tests for identification of internal and external parasitic infections
- 3.3. Recording laboratory data
- 3.4. Performing calculations on data
- 3.5. Recording and giving laboratory test result feedback
- 3.6. Reporting out of specification or atypical results appropriate personnel
- 3.7. Shutting down of equipments after completion of work
- 3.8. Cleaning work places and equipment after accomplishment of tasks



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text 	<ul style="list-style-type: none"> • Assign sign language interpret • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe



	<ul style="list-style-type: none"> ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Present the lecture in video format • Summarize main points 		<p>impairments on their upper limbs to take note</p> <ul style="list-style-type: none"> • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the 	<ul style="list-style-type: none"> • Use sign language interpret • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs



	<ul style="list-style-type: none"> process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up Introduce the trainees with other group member 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	❖ Brief the thematic issues of the work		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpret ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpret • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration/Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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ASSESSMENT CRITERIA

LO1. Follow OHS practices and Assist in work place hazard Identification and risk control

- Personal hygiene and cleanliness standards are maintained
- Specimens from domestic animals are collected ethically
- Specimens are handled to minimise the spread of pathogens to animals and human
- Hazards in the workplace are recognised and reported
- Workplace procedures and work instructions are followed for controlling risks
- Risks to self, bystanders, the public and animals are recognized and action taken to eliminate
- Safety training is provided

LO2. Prepare material and equipment and process sample for test

- Equipment and materials are tested for functionality
- Pre-use and safety checks of equipment are performed
- Faulty or unsafe equipment is identified and reported to appropriate personnel
- Calibration status of equipment and any out of calibration items is checked
- Sample description is recorded and compared with specification and any discrepancies
- Samples with appropriate standard methods are prepared
- Samples to the standards tests are identified, prepared and measured

LO3. Conduct basic laboratory procedures

- Basic laboratory tests for identification of microbial infections are conducted
- Basic laboratory tests for identification of internal and external parasitic infections are conducted
- Laboratory data are recorded



- Calculations performing on laboratory data as required
- Laboratory test result is recorded and feedback given to the clients and/or target body
- Specification or atypical results reported promptly to appropriate personnel
- Shut down of equipments after completion of work
- Work places and equipment is cleaned after accomplishment of the tasks



Annex: Resource Requirement

Module Code and Title: AGR AHC4 13 09121 Conducting Basic Laboratory Techniques and Procedures				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	TTLM	To be developed by the trainer	25	1:1
2	Text Books	<ul style="list-style-type: none"> • Modern Parasitology, A text book of parasitology. F. C. G. Cox. 2nd ed. Blackwell. • Veterinary Parasitology. G. M. Urquhart., J. Armaour., J. L. Duncan., A. M. Dunn, and F.W, and F.W • Clinical Veterinary Microbiology. P.J. Quinin and his collageus. • Clinical Veterinary Microbiology. 5th ed. 2004. P.J. Quinin, M. E. Cartey, B. Markey and G. R. Carter. • Veterinary microbiology and microbial diseases. 2nd ed. 2002. P.J. Quinin, M. • Veterinary microbiology. 1sted. 1999. D. C. Hirsh and Y. C. Lee. 	5	1:5
2	Reference manuals	Prepared by trainer	5	1:5



3	Audio-video preparations and animations	To be downloaded from free webs	1	1:5
4.	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer	1	1:5
B.	Learning Facilities & Infrastructure			
1.	Lecture Room with multimedia equipment(LCD project, Television, software and CD)	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	White and black board	Standard	1 each	1:25
4.	Farm	Shoat farm, dairy and beef farm and poultry farm		1:25
5.	Laboratory room equipped with benches and tables	Standard	25 laboratory chairs 6	1:1 1:5(respectively)



			laboratory tables	
6.	Crush	<ul style="list-style-type: none"> Crush for Bovine and Equine Cage for companion animals 	1	1:25
C.	Consumable Materials			
1.	Paper	A4-size	5 rim	1:5
2	Pen	Bail	3 pack	3:1
3	Marker	Standard		As require
4	Chalk	Standard		As required
2.	Chemicals	<ul style="list-style-type: none"> Ethanol alcohol Isopropyl alcohol Formaline Glutaraldehyde Iodophore Potassium iodide Preservatives 		As required or needed
3	Reagents	<ul style="list-style-type: none"> Staining chemicals (Giemsa stain, gram stain, Iodine, Gram Violate, methylene blue, malachite green, carbolfuction, cotton blue, 		As required or needed



		absolute methanol) <ul style="list-style-type: none"> • Logol's iodine • Hydrogen peroxide • Heamatoxiline, • Eosin • Phenol red • Methyl red • Benidict's reagent • Robert's reagents • Sodium nitro-persuade reagent 		
4	Gauze	Medical grade sterile cotton gauze		As required or needed
5	Cotton	Medical grade sterile		
6	Cover slips	Packed		As required
7	Nasal Swabs	Packed		As required
8	Microscopic slides	Packed		As required
9	Gloves	<ul style="list-style-type: none"> • Medical grade sterile examination glove • Medical grade sterile surgical glove 		As required or needed
10	Nutrient agar	Bottle		As required



11	Blood agar	Bottle		As required
12	McConkey agar	Bottle		As required
13	Peptone water	Bottle		As required
14	Record books	Number		As required or needed
D.	Tools and Equipments			
1	Syringe	Disposable syringe 1ml,3ml,5ml, 10ml and 20ml		As required
2	Autoclave	<ul style="list-style-type: none"> Manual: 100-135°C, average cycle: 35 minutes; chamber dimensions: 10 x 15.5, reservoir capacity Automatic 	1 1	1:25
5	McMaster egg counting slide		25	1:1
6	Haemocytometer		5	1:5
7	Centrifuges	<ul style="list-style-type: none"> Fecal centrifuge Hematocrit centrifuge 	1 1	1:25 each



8	Pipettes	<ul style="list-style-type: none"> • Micro pipette (Unichannel or 8 channel) • 5ml pipettes • 10ml pipettes • 20ml pipettes • 50ml pipettes 	5	1:5 each
9	Forceps	<ul style="list-style-type: none"> • Adson tissue forceps • Dressing Forceps • Tissue forceps • Mosquito hemostatic forceps • Micro Adson Forceps • Aliss tissue forceps • Mosquito Forceps 	5	1:5 each
10	Beaker	Standard		As required
11	Flask	Standard		As required
12	Funnel	Standard		As required
13	Petridish	<ul style="list-style-type: none"> • Large size • Medium size • Small size 		As required
14	Laboratory benches		5	1:5
15	Inoculating needles	<ul style="list-style-type: none"> • Straight • Loop 		As required



16	Incubator	For Bacteriological culture	1	1:25
17	Test tube racks	Standard	5	1:6
18	Test tubes	Standard		As required
19	Sensitive balance	Electronic	1	1:5
20	Water bath	Electronic	1	1:25
21	Mortar & pestle	Standard		As required
22	Baerman apparatus	Standard	1	1:25
23	Refrigerators	Standard	1	1:25
E	Personal protective equipment			
1	Gloves	Standard		As required
2	Hearing protections	Standard		As required
3	Overalls	Standard	25	1:1
4	Eye protection	Standard		As required
5	Respirator or face mask	Standard		As required



LEARNING MODULE GUIDE 14

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Participating in Prescription and Administration of Veterinary Drug
MODULE CODE:	AGR AHC4M14 09 21
NOMINAL DURATION:	75Hours

MODULE DESCRIPTION: This module covers the knowledge, skill and attitude required to identify and Control veterinary drug use, and associated risk management procedures; manage, prescribe and administer drugs according to organizational guidelines and procedures in veterinary service. It also covers the knowledge and skill required to control drug and chemical stock and clinic security.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

LO1: Identify and control of drug use and associated risk

LO2: Manage and administer drugs, biological and fluids

LO3 Assist in stock control and clinic security

MODULE CONTENT

LO1: Identify and Control of Drug Use and Associated Risk

- 1.1. Recognizing and reporting **risk**
- 1.2. Following workplace procedures and work instructions for controlling risks
- 1.3. Following safe work practices
- 1.4. Following workplace and management procedures
- 1.5. Undertaking effective communication using technical terms of drug
- 1.6. Undertaking safety checks on equipment

LO2: Manage and Administer Drugs, Biological and Fluids

- 2.1. Following OHS procedures and using personnel protective equipment
- 2.2. Preparing, reading and interpreting prescription papers
- 2.3. Applying dosage and route of administration



- 2.4. Giving and assessing treatments/Vaccines effects
- 2.5. Administering fluidtherapy for controlling metabolic diseases
- 2.6. Disposingwaste
- 2.7. Keeping and reporting record

LO3 Assisting in Stock Control and Clinic Security

- 3.1. Taking inventory of veterinary supplies and medicines
- 3.2. Ordering medicines under direction of the veterinarian
- 3.3. Checking clinic stocks
- 3.4. Handling and storing drugs
- 3.5. Using clinic security measures



LEARNING METHODS:				
For None ImairedTrainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture- discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<ul style="list-style-type: none"> • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 			on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up



				<ul style="list-style-type: none"> • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



	process		process/ practical training	
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration /Observation	<ul style="list-style-type: none"> • Brief the instruction or provide them in large text/Brail • Time extension 	<ul style="list-style-type: none"> • Use sign language interpreter • Brief on the instruction of the exam • Provide activity-based/ practical assessment method • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Brief on the instruction of the exam • Use loud voice • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Conduct close follow up • Time extension
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ASSESSMENT CRITERIA

LO1. Identify and Control of Drug Use and Associated Risk Management Procedures

- Risk in the veterinary drug stores, workplace, in the public and animals as well as to self are recognized and reported to designated personnel according to national or/and organizational guidelines and procedures.
- Workplace procedures and work instructions for controlling risks are followed accurately.
- Safe work practices including following OHS procedures and use of PPE clothes and equipment are followed according to enterprise guidelines.
- Workplace and management procedures for dealing with emergencies are followed whenever necessary within the scope of responsibilities.
- Effective communication is undertaken using technical terms of drug use.
- Basic safety checks on all equipment are undertaken before operation according to organizational procedures.

LO2. Manage and Administer Drugs, Biological and Fluids

- Work is done following OHS procedures and using appropriate personnel protective clothes and equipment in a manner that ensures the safety of self, others and animals
- Prescription papers are properly prepared, read and interpreted following the enterprise guide lines.
- Appropriate dosage or formulation and route of administration are applied according to the enterprise guide lines; numeracy skills required to weigh and measure animals, check drug dosages and record patient information are required.
- Treatments/Vaccines are given and effects are assessed according to the enterprise guidelines.
- Fluid therapy is administered for controlling metabolic diseases and as supplement



for needy animals as prescribed according to organizational treatment protocol

- Waste is disposed of in line with legislative requirements.
- Record is kept in and reported to the supervisor

LO3. Assist in Stock Control and Clinic Security

- Regular inventory of veterinary supplies and medicines is taken according to clinic policies.
- Medicines and supplies are ordered under direction of the duty veterinarian and qualified veterinary nurse.
- Clinic stocks are checked as they are received against quantities ordered and priced.
- Drugs are handled and stored securely in accordance with clinic and legislative requirements; legislative requirements relating to the handling, storage and security of drugs, including dangerous drugs should be considered
- Clinic security measures are used in accordance with clinic procedures.



Annex: Resource Requirements

AGR AHCS4M14 09 21: Participating in Prescription and Administration of Veterinary Drug				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Journals/Publication/Magazines		25	1:1
3.	Books	<ul style="list-style-type: none"> Veterinary Pharmacology and therapeutics. 8thed. 2000. The Merck veterinary manual. 8th ed. 2008. Veterinary epidemiology. 3rded 2008. Applications of quantitative methods in epidemiology. Veterinary clinical epidemiology. 2006. 		
4.	Manuals			
B.	Learning Facilities and Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25



3.	Work station	Equipped with household facility and hand wash basin Standard	1	1:25
4.	Open air clinic	Standard	1	
5.	Farm	Shoat farm, dairy and beef farm, poultry farm	1 each	
6.	Laboratory room equipped with benches and tables	Standard	1	
7.	Crush	Bovine standard	1	
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4.	Marker	Pack	1	
5.	Filip chart	Pack	1	
4.	Chalk	Pack	1	
5.	Disposable syringe	Pack (5ml)	1	
5.	Disposable syringe	Pack (10ml)	1	
6.	Slide and cover slips	Pack	1 each	
7.	Swabs	Pack	1	
D.	Personal Protective Equipments			
1.	Glove	pack	1	
2.	Savlon	Lit	1	
3.	Alcohol	Lit	1	
5.	Arm length glove	Pack	1	



6.	Detergents			As required
7.	Gown	Standard	26	1:1
E	Different types of vaccines and drugs			
1.	Different type of vaccine	Dose		As required
2.	Antibiotic drugs			As required
3.	Anthelmintic drugs			As required
4.	Antifungal drugs			As required
5.	Antiprotozoal drugs			As required
D.	Tools and Equipments			
1.	Hemocytometer	Standard	2	
2.	Hematocrit centrifuge with reader	Standard	1	
3.	Microscope	Compound Stereo microscope	3 each	
4.	Syringe	Manual syringe	6	
		Automatic syringe	5	
5.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
6.	Duster	Standard	1	
7.	Laptop	Ram 2, hard disk 500 GB	1	1:25
8.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25



9.	Telephone	Standard	5	1:5
10.	Blackboard	Standard	1	1:25
11.	Brail	standard	25	1:1
12.	Audio-video		1	1:25



LEARNING MODULE 15

TVET-PROGRAMME TITLE:	Animal Health Care Service IV
MODULE TITLE:	Carrying-out Veterinary Public Health Activities
MODULE CODE:	AGR AHC4M18 09 21
NOMINAL DURATION:	85Hours
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to participate in carrying-out community awareness on veterinary public health issues, perform animal meat inspection and understand public health issues associated with meat consumption.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Perform community awareness on veterinary public health issues LO2. Prepare to conduct the ante mortem and post-mortem examination, LO3. Carry out post-mortem examination LO4. Complete the post-mortem examination LO5. Develop knowledge of public health issues associated with food of animal origin MODULE CONTENTS: LO1. Perform community awareness on veterinary public health issues 1.1 Structuring, finalizing and accepting VPH issues plans. 1.2 Conducting Veterinary public health awareness activities. 1.2.1. Zoonotic diseases 1.2.2. Source of infection 1.2.3. Mode of transmission, 1.2.4. Prevention and control. 1.2.5. Awareness on hygienic management of meat. 1.3. Operating relevant equipment and materials correctly.	



1.4. Addressing Current public health issues.

LO2. Prepare to conduct the ante mortem and post-mortem examination.

2.1. Obtaining and preparing Correct clothing, equipment and resources.

2.2. Identifying OHS hazards.

2.3. Obtaining information about the animal to be examined.

2.4. Keep clean work area.

2.5. Performing Ante mortem examination.

2.6. Carrying out external assessment and signs of abnormalities.

2.7. Identifying abnormal characteristics.

2.8. Passing Judgment for slaughter.

2.9. Moving slaughtered animal to slaughtering room.

2.10. Carrying out Humane methods of slaughtering.

LO3. Carry out post-mortem examination

3.1. Ensuring complete bleeding prior to dissection.

3.2. Conducting dissection

3.3. Inspecting Organs, tissues and structures.

3.4. Taking samples of organs

3.5. Conducting Inspection works on meat

3.6. Disposing Offal and waste products

LO4. Complete the post-mortem examination

4.1. Passing Judgment for consumption of carcass.

4.2. Labelling whole or part of carcass with suspicious signs.

4.3. Labelling, packing and sending samples.

4.4. Collecting information during post-mortem examination.

4.5. Cleaning, disinfecting and storing post mortem area and equipment.

4.6. Completing Personal biosecurity clean-up.

LO5. Develop knowledge of public health issues associated with food of animal origin

5.1. Identifying Pathological lesions and zoonotic diseases



- 5.2. Conducting slaughter in unhygienic area.
- 5.3. Assuring Meat quality and hygiene maintenance.
- 5.4. Describing risk of consuming meat and meat products.
- 5.5. Condemning organs found unfit for consumption.



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brailformat ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop



Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	work		with other group member ❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges



		<ul style="list-style-type: none"> • Time extension 		
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



ASSESSMENT CRITERIA:

LO.1. Perform community awareness on veterinary public health issues

- Plans are structured and finalized and accepted in accordance with veterinary public health guidelines and procedures.
- Veterinary public health awareness activities are conducted using effective message development and delivery techniques.
- Relevant equipment are operated correctly and materials are used effectively to assist the community in understanding the activities.
- Current public health issues are addressed according to international, national or enterprise policy procedures and guidelines.

LO.2. Prepare to conduct the ante mortem and post-mortem examination

- Correct clothing, equipment and resources are obtained and prepared for use.
- OHS hazards associated with the procedure are identified and appropriate action is taken to protect self and others.
- All relevant preliminary information about the animal to be examined is obtained and collated.
- Work area is kept in clean and hygienic condition according to the enterprises requirements.
- Ante mortem examination is performed on the animal to be slaughtered in accordance with ante mortem inspection procedures and guidelines.
- External assessment of the animal is carried out and outward signs of abnormalities or injury are noted.
- Abnormal characteristics that may indicate the presence of notifiable and potentially hazardous conditions or diseases are identified and appropriate action is taken prior to slaughter.
- Judgment for slaughter is passed on the animal based on ante mortem examination guidelines and enterprise procedure



- The animal to be slaughtered is moved to slaughtering room using appropriate manual lifting techniques and/or equipment.
- Humane methods of slaughtering the animal are carried out in the slaughtering room.

LO3. Carry out post-mortem examination

- Completed bleeding is ensured prior to dissection.
- Dissection is conducted using appropriate techniques and equipment to avoid cutting into organs or stomach cavity
- Organs, tissues and structures are inspected using post mortem inspection procedures.
- Samples of organs, other tissues and fluid samples are taken if necessary, where appropriate, and prepared in accordance with institutional and laboratory requirements.
- Inspection works on meat are conducted according to the enterprise guide lines.
- Offal and waste products are disposed of or destroyed in an environmentally responsible manner and according to State/Territory and local authority health standards.

LO4. Complete the post-mortem examination

- Judgment for consumption is passed on carcass based on ante mortem and post mortem examination results and in accordance with institutional requirements and procedures.
- Whole or part of carcass with suspicious signs are labelled and taken to separate room
- Correctly labelled and packaged samples are sent for analysis.
- All information about the animal examined and the records of observations made during the post-mortem are collated and forwarded to the relevant persons for analysis and diagnosis

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- Post mortem area and equipment used are hygienically cleaned, disinfected and stored for re-use.
- Personal biosecurity clean-up is completed in accordance with the institution's policies and procedures.

LO5. Develop knowledge of public health issues associated with food of animal origin

- Pathological lesions and zoonotic diseases are identified based on ante mortem and post mortem inspection judgments
- Effect of conducting slaughter in unhygienic area on quality of meat is explained
- Meat quality and hygiene maintenance is assured through meat preservation methods
- Risk of consuming raw meat and meat products is describe
- Appropriate disposal of part of carcass or organs found unfit and completely condemned carcass are undertaken

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			September 2021



ANNEX: RESOURCE REQUIREMENT				
AGR AHC4M15 09 21: Carrying-out Veterinary Public Health Activities				
No	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	Reference books	<ul style="list-style-type: none"> • Meat hygiene. 10th ed. 1999. J. F. Gracey, D. S. Collins and R. J. Huey. • Wilson's practical meat inspection. 7th ed. 2005. W. G. Willson. • Manual on meat inspection for developing countries. 2nd ed. 2000. D. Herenda, P. J. Chambers, A. Ettriqui, P. Seneviratna and T. J. P. Da Silva. • Manual for meat inspection for developing countries. WHO manual. • Epidemiology and Public Health 	5	1:5
2.	Reference manuals	to be prepared by Federal TVET Agency experts	5	1:5
3	TTLM	to be prepared by TVET College instructors	25	1:1
5	written and graphical instructions	to be prepared by the college	5	1:5



6	Bulletins, data sheet, diagrams or sketches	to be prepared by the trainer/college	5	1:5
7	Workplace guidelines/manuals	to be prepared Federal TVET Agency Experts	25	1:1
B.	Learning Facilities & Infrastructure			
1	Well-equipped Audio visual room	8 x 5 sqm	1	1:25
2.	Demonstration site	Abattoir	1	1:25
3	Well-equipped Lecture rooms (with tables, chairs and whiteboard)	8 x 5 sqm	1	1:25
4	School Bus	Comfortable for 25 trainee	1	1:25
C.	Consumable Materials			
5	Note pads, Pens	Pack		As required
D.	Tools and Equipment's			
1.	Postmortem kit	Set	5	1:5
2	Printer	Colored/mono	1	1:25
3.	Laptop	Toshiba core i 7	1	1:25
4.	LCD	Standard	1	1:25



LEARNING MODULE GUIDE 16	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level- IV
MODULE TITLE:	Performing Minor Surgical and Obstetrical Operations
MODULE CODE:	AGR AHC4 MO16 0921
NOMINAL DURATION :	85Hours
MODULE DESCRIPTION: This module covers knowledge, skills and attitude required to prepare for surgical procedure, perform minor surgical and obstetrical operations, and provide post-surgical patient care. This Module requires the skills and knowledge of preparing the surgical patient, surgical tools, instruments, and operation theater; applying suture and knot, Administer local and regional anesthesia, perform minor surgical and obstetrical operation; and monitoring and care for patients while they are under anesthesia and under custody.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1: Carry out pre-surgical preparation LO2: Perform minor surgical and obstetrical operations LO3: Carry out post-operative procedures	
MODULE CONTENT LO1. Carry out pre-surgical preparation 1.1. Implementing OHS procedures for surgical operations. 1.2. Preparing PPE, Materials, equipment and tools. 1.3. Preparing operation theatre 1.4. Carrying Pre-surgical patient preparation. 1.5. Providing Assistance on preparation of the surgical team. LO2: Perform minor surgical and obstetrical operations 2.1. Providing assistance during operating minor surgery.	



- 2.1. Applying different Suture patterns and knots.
- 2.3. Administering Pre-anesthetic and pre-operative medication.
- 2.4. Administering regional and local anesthesia.
- 2.5. Performing Pre-anesthetic and pre-operative evaluations
- 2.6. Performing minor surgical operations
- 2.7. Managing minor obstetrical and gynecological cases

L03. Carry out post-operative procedures

- 3.1. Manage animals post-anesthetically and post-operatively
- 3.2. Applying Fluid therapy, medication, dressings, bandages and oxygen.
- 3.3. Monitoring surgical wounds for signs of healing.
- 3.4. Monitoring post-anesthetically, post-operatively and post-operative abnormalities.
- 3.5. Recognizing Post-anesthetic and post-operative emergencies.
- 3.6. Giving Advice to patient.
- 3.7. Cleaning surgical materials and operation theatre.
- 3.8. Disposing wastes.
- 3.9. Recording and reporting.



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in <u>Brail format</u> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop



	<ul style="list-style-type: none"> Summarize main points 	format <ul style="list-style-type: none"> Summarize main points 		
Demonstration	<ul style="list-style-type: none"> Conduct close follow up Use verbal description Provide special attention in the process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> use Sign language interpreter Use video recorded material Ensure attention of the trainees Provide structured training Show clear and short method Use gesture Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Illustrate in clear & short method Use Video recorded material Ensure the attention of the trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	<ul style="list-style-type: none"> • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	<ul style="list-style-type: none"> ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb



	(if necessary) <ul style="list-style-type: none"> Time extension 	<ul style="list-style-type: none"> Time extension 	necessary.	impairment <ul style="list-style-type: none"> Time extension for trainees having severe upper limb impairment
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ASSESSMENT CRITERIA

LO1. Carry out pre-surgical preparation

- Safe work practices including OHS procedures for surgical operations, and work place policies are implemented.
- PPE, Materials, equipment and tools required for surgery, and animal capturing and restraining procedures are prepared according to the case requirement and the enterprise guide lines.
- The operation theatre is prepared as instructed by the surgeon and following the enterprise protocol.
- Pre-surgical patient preparation is carried out according to the enterprise guide lines.
- Assistance is provided on preparation of the surgical team according to the organizational work protocol.

LO2. Perform minor surgical and obstetrical operations

- During operating major surgery assistance is provided as required by the veterinary surgeon and according to the organizational work protocol.
- Different Suture patterns and knots are applied and their application is assisted on opened surgical sites as required and instructed following the organizational surgical operation protocol.
- Pre-anaesthetic and pre-operative medication is administered to animals as required according to the organizational protocol.
- Regional and local anesthesia is administered to animals as required according to the organizational protocol.
- Pre-anaesthetic and pre-operative evaluations of animals are performed, including indications for the use of tranquillizers, sedatives, analgesics and antibiotics in accordance with institutional policies and procedures
- Minor surgical operations are performed on different farm animals following the organizational surgical operation protocol.



- Minor obstetrical and gynecological cases are managed following the enterprise guidelines and treatment protocol.

LO3. Carry out post-operative procedures

- Analgesics and other supportive therapies are used to manage animals post-anesthetically and post-operatively
- Fluid therapy, medication, dressings, bandages and oxygen are applied to animals as required according to the organizational treatment protocol.
- Surgical wounds are monitored for signs of healing, inflammation or infection.
- Animals are monitored post-anesthetically and post-operatively and post-operative abnormalities are responded to appropriately.
- Post-anaesthetic and post-operative emergencies are recognized and responded to immediately.
- Advice is given to patient owners based on the surgical procedures and the case requirement.
- Surgical materials and operation theatre are properly cleaned, disinfected and sterilized according to the enterprise requirements.
- Wastes are disposed of according to recommended hygiene Standards and environmental policy.
- Information is recorded and reported to supervisor according to the enterprise guide lines.



Annex: Resource Requirement				
AGR AHC4 M16 0921:Perform minor surgical and obstetrical Operation				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	Trainer made hand out	25	1:1
2.	Textbooks		5	1:5
3.	Reference Books			
3.1	Principles of surgery manual	Schwartz's McGrew Hill	5	1:5
3.2	Postoperative wound infection	ByMosman2004page 63,69		
3.3.	Medical, surgical, and anaesthetic nursing for veterinary technicians,	pratt 2 nd edn	5	1:5
3.4	-A Text book Of Animal Health and Hygiene,	Jagdish P. 1999 1 st edn	5	1;5
3.5	Clinical Text Book for veterinary technicians,	Denis M, <i>et al</i> (2002) 5 th edition	5	1:5
3.6	Veterinary surgical techniques	Amresh K.	5	1;5



4	Written and graphical instructions	To be prepared by the trainer		
B.	Learning Facilities & Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Surgery theater/Room	Equipped with household facility and hand wash basin Standard	1	1:25
C.	Consumable Materials			
1	Chemicals acid, alkaline, salts, disinfectants ,antiseptics		as required	
2	Drugs	antibiotics, different sedatives, tranquilizers, anaesthetic agents	„	
3	Others	Gauze, cotton Plasters, syringe, needle arm length gloves, surgical gloves and intra mammary infusion and Sprayer,	„	
4	Paper	A4	5rim	1:5



3	Sterilizer	Electrical	1	1:25
3.	Pen	Ball point	5	1:5
4	Different types of gloves	Standard		
5	Disinfectant solutions	Standard		
6	Mask	Standard	25	1:1
7.	Anaesthetic drugs	Standard		
8.	Drapes	Standard	5	1:5
9	Suture materials	Cut gut, silk, nylon...etc	25	1:1
10.	Apron	Rubber	5	1:5
11.	Gowns/overall	Cotton	25	1:1
D.	Tools and Equipment's			
1	Personal protective and treatment equipment's	Gowns, gloves, apron, rubber boots, goggles, scalpel, handle and blade, drenching gun, Baling gun, mouth gug, stomach tube, mortar, piston	”	
2	Surgical materials	Surgical kit , suturing materials(cat gut, nylon, silk), suturing	”	



		needles, different scissors, forceps, surgical blade and scalpel handle, wound dressing materials,		
3	Restraining materials	nose ring, rope, crush, bull nose holder and chains shackles, neck collar, kennels crush, forceps, scalpel hoof knife, balls, splint stethoscope, and chemicals, gloves, tannic acid powder, tincture iodine, castor oil, obstetric set, activated and charcoal.	„	
4	Whiteboard	Standard	1	1:25
5	Laptop	Ram 2, hard disk 500 GB	1	1:25
6	Operating table/surgical furniture		1	1:25



8	LCD projector	SD cards, AV compatibility	1	1:25
10	Face mask	Standard	5	1:5
11	Blackboard	Standard	1	1:25
12	Apron	Cotton	25	1:1
14	Eye goggle	Standard	25	1:1
15	Boots (safety shoes)	Standard	25	1:1



LEARNING MODULE 17

TVET-PROGRAMME TITLE: Animal health care service, Level IV

MODULE TITLE: Euthanizing sick, injured or unwanted animals

MODULE CODE: AGR AHC4 M17 0921

NOMINAL DURATION: 35 Hours

MODULE DESCRIPTION:

This module covers the process of euthanizing sick, injured or unwanted animals in a humane way that complies with safe operating practices and with ethical, welfare and legislative requirements. A person working at this level would be expected to conduct euthanasia of individual animals under predictable and controlled circumstances.

LEARNING OUTCOMES:

At the end of the module the learner will be able to:

LO1: Prepare animal to euthanasia under supervision

LO2: Carry out euthanasia of an animal

LO3: Complete euthanasia

MODULE CONTENTS:

LO1- Prepare to euthanize an animal under supervision

- 1.1 Identify animals intended for euthanasia
- 1.2 Identify euthanasia methods for different animal species
 - 1.2.1 Physical method
 - 1.2.2 Injection method
- 1.3 Prepare and keep equipment and materials required for Euthanasia
 - 1.3.1 Handling, transporting and storing equipment's and materials
- 1.4 Determining and gathering appropriate human assistance for Euthanized procedure
- 1.5 Identify hazards and risks associated with euthanasia



1.6 Obtaining license and permits to conduct euthanasia

LO2- Carry out euthanasia of an animal

2.1 Use PPE and safety equipment

2.2 Handling and transporting safely statutory requirement equipment

2.2.1 Control an Euthanized animal

2.2.2 Legislation, including Prevention of Cruelty to Animals Acts, the Ethiopian Code of Practice for the Care and Use of Animals for Scientific Purposes, Wildlife Acts, Fisheries Acts and Quarantine Acts

2.2.3 Government regulations covering the transport and disposal of hazardous wastes

2.2.4 Organizational standard operating procedures

2.2.5 Owners agreement

2.3 Restraining Euthanized animal physical to minimize pain and distress

2.4 Applying humane and acceptable method of euthanasia

2.5 Monitoring euthanasia procedure

2.6 Follow Euthanasia guidelines and procedures and relevant legislative

LO3: Complete euthanasia

3.1 Ensuring death of animal

3.2 Handling of animal carcass for research or post-mortem examination

3.3 Dispose of animal carcasses and biological waste not required for research or post-mortem purposes

3.4 Handling and moving animal carcass

3.5 Decontaminate, clean and store equipment and materials or dispose of Recording and reporting euthanized animals

3.5.1 Recording the date, time, operator; animal description (e.g. age, breed / type, sex, color, coat, size, weight, unique features); and

3.5.2 Recording animal history including the interval held, source location.

LEARNING METHODS:

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- Lecture-discussion
- Demonstration
- Role-play/simulation
- Video show

ASSESSMENT METHODS:

- Written Test /Exam
- Oral Questioning or Interview
- Demonstration/ Practical assessment by direct observation of tasks through simulation/Role-plays

Assessment schedule outcome

- Assessment will be conducted in each learning

Assessment Conditions

- The participant will have access to
 - Fully equipped work place or medication tools, equipment and necessary consumable materials

ASSESSMENT CRITERIA:

LO1- Prepare to euthanasia an animal under supervision

- Animal intended for euthanasia is identified in accordance with organizational guidelines and procedures.
- Method selected for euthanasia is made consistent with organizational guidelines and procedures and legislative requirements.
- Equipment and materials required for euthanasia are kept and prepared in accordance with organizational procedures and legislative requirements.
- Appropriate human assistance for the procedure is determined and gathered.
- Hazards associated with the euthanasia are identified in accordance with OHS procedures.
- Licenses and permits required to conduct euthanasia are reviewed with the supervisor and obtained as required.

LO2- Carry out euthanasia of an animal

- PPE and safety equipment are used in accordance with OHS standards and statutory requirements.



- Equipment are handled and transported safely at all times in accordance with statutory requirements and industry practices.
- Animal is physically restrained in a way that minimises its pain and distress.
- Euthanasia method is applied according to the requirements of the task.
- Euthanasia procedure is monitored to ensure that the animal's death is rapid and without complications or undue suffering.
- Organisational guidelines and procedures and relevant legislative requirements are followed.

LO3- Complete euthanasia

- Death of animal is confirmed.
- Carcass, if required for research or post-mortem examination, is handled in accordance with organisational guidelines and procedures and legislative requirements.
- Animal carcass and biological waste not required are disposed of in accordance with organisational guidelines and procedures and legislative requirements.
- Animal carcass is handled and moved in accordance with OHS requirements.
- Equipment and materials are disposed of or are decontaminated, cleaned and stored in accordance with standard operating procedures.
- Records relating to the euthanized animal are kept.

RESOURCE CONDITIONS (ANNEX)

AGR AHC4 M20 2021

Euthanizing sick, injured or unwanted animals

Item No	Category/Item	Description/Specific ations	Quantit y	Recommend ed ration (Item: trainee)	Requirements (e.g. Maintenance)
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A	Learning Materials				
1	Reference books	<ul style="list-style-type: none">• Euthanasia training material (rebeca H., 2002).• Animal euthanasia (Michael D., 1997).• Euthanasia of the companion animal (William J.Kay, 1998).• Hatch, R.C. 1982.• Euthanatizing agents. In Veterinary Pharmaceuticals and Therapeutics (eds. N.M. Booth and L.E. McDonald), fifth edition, pp. 1059–64.• Ames, Iowa	5		1:5



		State University Press, USA. • Carding, T. 1977. Euthanasia of cats and dogs. Animal Regulation Studies 1: 5–2			
2	Reference manuals	to be prepared by the government, trainer /organization	5		1:5
3	TTLM and Handouts	to be prepared by the trainer	25		1:1
4	Technical books	to be prepared by the trainer /organization	5		1:5
5	written and graphical instructions	to be prepared by the trainer /organization	5		1:5
6	Bulletins, data sheet, diagrams or sketches	to be prepared by the trainer/organization	1		1: 5
7	Workplace (clinic) guidelines/manuals	to be prepared by the organization	5		1: 5
7	Computer	DELL,IBM,ACER,	5		1:5



		ETC			
B	Learning Facilities & Infrastructure				
1	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concert block	1		1:5
2	Well-equipped Computer Room	Concert block	1		1:25
3	Laboratory Room	Concert block	1		1:25
4	Well Equipped Lecture Room (with tables, chairs, whiteboard)		1		1:25
C	Consumable materials				
1	Blackboard	White or black	1		As required
2	Chalk	Packed or Marker	5		1:5
3	Eraser	Standards	5		1:5
4	Stationary	4 paper or pen	5		1:5
5	disinfectants, cleaning agents, syringes, needles, scales, clippers,, gowns, gloves, apron, rubber boots of appropriate size , goggles				As required
6	Drug	To be purchased by college	communal		As required
D	Tools and Equipment's				



1	<ul style="list-style-type: none"> • Firearms, captive bolts, • syringe pole for distance injections, • restraining devices, • stainless steel work surfaces / a rubber matting or similar non-slippery surface 				As required
2	Disposal units	Standard size	1		1:25
3	Refrigerator	Standards	1		1:25
4	Stethoscope	Standards	3		1:25



LEARNING MODULE 18

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Participating in Herd Health Management Program
MODULE CODE :	AGR AHCS4M18 09 21
NOMINAL DURATION :	50 Hours
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to participate in the development and implementation of herd health management programs and identification of herd health problems in the dairy, beef and poultry production systems. This unit requires the knowledge and skill to recognize the unique circumstances that affect the health of animals in each production systems; take part in the planning of economical herd health management programs which ensures the optimal care and well-being of the animals and reduce losses in productivity caused by disease and management errors, and perform disease prevention and control activities. The work is done in collaboration with a veterinarian, animal nutritionist and the producer.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1 Identify Hazard and risks LO2 Participate in the planning of herd health programs LO3 Participate in the implementation of regular herd health activities LO4 Record, Analyze and store Herd health and production information	
MODULE CONTENT LO1: Identify Hazard and Risks 1.1. Collecting and assessing information of hazard and risk control 1.2. Maintaining personal hygiene and cleanliness 1.3. Recognizing and reporting hazards in the workplace 1.4. Recognizing and taking action on risks	



LO2: Participate in the Planning of Herd Health Programs

- 2.1. Developing the herd health management program for the animal farms
 - 2.1.1. Dairy farm
 - 2.1.2. Beef production farm
 - 2.1.3. Poultry farm
- 2.2. Identifying farm production goals
 - 2.2.1. Dairy farm production goals
 - 2.2.2. Poultry farm production goals
 - 2.2.3. Beef farm production goals
- 2.3. Identifying herd health hazards and risks for the individual farms
 - 2.3.1. Herd health hazard for dairy and beef farm
 - 2.3.2. Herd health hazard for poultry farm
- 2.4. Identifying and assessing the critical areas of health abnormalities in the production cycle of farm animals
- 2.5. Identifying basic animal care and handling activities
 - 2.5.1. Feeding and watering
 - 2.5.2. Housing
 - 2.5.3. Sanitation
- 2.6. Selecting and planning disease prevention and controlling methods
 - 2.6.1. Immunization
 - 2.6.2. Early diagnosis and treatment of sick animals
 - 2.6.3. Isolation of sick animals
 - 2.6.4. Quarantine of newly introduced animals
 - 2.6.5. Cleaning and disinfection practice
 - 2.6.6. Visitors and animal movement control
 - 2.6.7. Internal and external parasite control programs

LO3: Participate in the Implementation of Regular Herd Health Activities

- 3.1. Performing and analysing visit and follow up of the farms

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- 3.2. Carrying out schedule and emergency treatment of sick and injured animals
 - 3.3. Conducting screening and testing of the herd for major animal health risks
 - 3.4. Identifying and assessing the critical areas of health abnormalities in the production cycle of farm animals
 - 3.5. Identifying and minimizing health abnormalities
 - 3.5.1. Abnormalities due to environmental
 - 3.1.1. Abnormalities due to stressor
 - 3.5.2. Abnormalities due to nutritional
 - 3.6. Preventing enhancing and dissemination source of disease to animal farms
 - 3.7. Performing pre-selected and planned disease prevention and control
 - 3.8. Identifying health abnormalities of non-productive animals and giving recommendations
- L04: Record, Analyze and Store Herd Health and Production Information**
- 4.1. Recording and analyzing production and performance
 - 4.2. Recording and analyzing herd health and production
 - 4.3. Recording and analyzing cost of drugs, chemicals and health intervention
 - 4.4. Analyzing and comparing records with the pre-set performance targets





LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in <u>Brail format</u> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop



	<ul style="list-style-type: none"> Summarize main points 	format <ul style="list-style-type: none"> Summarize main points 		
Demonstration	<ul style="list-style-type: none"> Conduct close follow up Use verbal description Provide special attention in the process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> use Sign language interpreter Use video recorded material Ensure attention of the trainees Provide structured training Show clear and short method Use gesture Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Illustrate in clear & short method Use Video recorded material Ensure the attention of the trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	<ul style="list-style-type: none"> • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	<ul style="list-style-type: none"> ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb



	(if necessary) <ul style="list-style-type: none"> Time extension 	<ul style="list-style-type: none"> Time extension 	necessary.	impairment <ul style="list-style-type: none"> Time extension for trainees having severe upper limb impairment
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ASSESSMENT CRITERIA

LO1 Identify Hazard and Risks

- Information regarding hazard identification and risk control is collected and assessed following the enterprise requirements.
- Personal hygiene and cleanliness standards are maintained in accordance with OHS procedures and organizational guidelines and procedures.
- Hazards in the workplace are recognized and reported to the supervisor.
- Risks to self, bystanders, the public and animals are recognized and action is taken according to the enterprise guide lines.

LO2 Participate in the Planning of Herd Health Programs

- The herd health management program for the animal farms is generally developed cooperatively by the herd veterinarian and the producer based on comparisons of herd performance with predetermined performance goals.
- Farm production goals are identified in consultation with the producer
- Herd health hazards and risks for the individual farms are identified
- Critical areas of the production cycle for the occurrence of animal health abnormalities and losses of herd production performance are identified.
- Basic animal care and handling activities are identified
- Disease prevention and controlling methods and programs which are economically feasible according to the farm production goals are selected and planned under supervision of the veterinarian.

LO3 Participate in the Implementation of Regular Herd Health Activities

- A regular visit and follow up observation is done to the animal farms and performance records are analyzed according to the enterprise regulations.
- Schedule and emergency treatment of sick and injured animals are carried out according to the enterprise regulation.
- Screening and testing of the herd for major animal health risks and suspected



diseases are conducted as required according to the enterprise guideline.

- The critical areas of health abnormalities in the production cycle of dairy, beef and poultry systems are identified and assessed
- Health abnormalities due to environmental, nutritional and animal handling stresses are identified and minimized for each animal farms according to the organizational guide lines.
- Entrance of any source of disease or diseases causing agents to these animal farms and their dissemination within the farm is prevented by taking basic and economical bio security measures
- Pre-selected and planed disease prevention and controlling activities are performed in each animal farms according to the organizational guide lines.
- Health abnormalities of non-productive animals are identified and recommendations/advise is given for nutritionist, animal care takers or Producers on the possible and economically significant actions to be taken

LO4 Record, Analyze and Store Herd Health and Production Information

- All production and performance information of the animal farms are recorded and regularly analyzed based on the enterprise guideline
- Incidence of any health abnormality and actions taken for its control are recorded and their success and economical feasibility is analyzed according to the organizational guideline and in relation to the pre-set plan.
- Cost of drugs, chemicals and any health intervention is recorded and analyzed according to the organizational guideline and in relation to the pre-set plan
- Records are regularly analyzed and compared with the pre-set performance targets according to the organizational guideline.



AGR AHCS4M18 0921: Participating in Herd Health Management Program				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Journals/ Magazines		25	1:1
3.	Books	<ul style="list-style-type: none"> Herd health, food animal production Medicine 3rded. Herd health: a textbook of health and management of agricultural animals 		
4.	Manuals	<ul style="list-style-type: none"> Dairy herd health management manual. A guide for veterinarians and dairy professionals Animal health management review tools 		
B	Learning Facilities and Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Work station	Equipped with household facility and hand wash basin Standard	1	1:25
5.	Farm	Shoat farm, dairy and beef farm, poultry farm	1 each	
6.	Laboratory room equipped with benches and tables	Standard	1	
7.	Crush	Bovine standard	1	
8.	Open air clinic	Standard	1	



C.	Consumable Materials			
1.	Paper	A4	5	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4.	Marker	Pack	1	
5.	Filip chart	Pack	1	
6.	Glove	pack	1	
7.	Savlon	Lit	1	
8.	Alcohol	Lit	1	
9.	Chalk	Pack	1	
10.	Arm length glove	Pack	1	
11.	Different type of vaccine	Dose		As required
12.	Antibiotic drugs			As required
13.	Anthelmintic drugs			As required
14.	Antifungal drugs			As required
15.	Antiprotozoal drugs			As required
16.	Syringe	Manual syringe	6	
		Automatic syringe	5	
		Disposable syringe	10	
17.	Cover slips and slide	Pack	1 each	
18.	Swabs	Pack	1	
19.				
E	Tools and Equipments			
1.	Whiteboard	Magnetic whiteboard with	1	1:25



		mobile stand Wall thickness of iron stand is 1.2mm		
2.	Boot	Pcs	2pair	
3.	Overall	Pcs	1	
4.	Gown	Pcs	1	
5.	Duster	Standard	1	
6.	Laptop	Ram 2, hard disk 500 GB	1	1:25
7.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
8.	Telephone	Standard	5	1:5
	Blackboard	Standard	1	1:25
9.	Brail	Standard	25	1:1
10.	Audio-video	Standard	1	1:25



LEARNING MODULE 19	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level- IV
MODULE TITLE:	Establishing Quality Standards
MODULE CODE:	AGR AHC4 M19 0921
NOMINAL DURATION :	40 Hours
MODULE DESCRIPTION : This module covers the knowledge, skills and attitude required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1: Establish quality specifications for product LO2: Identify hazards and critical control points LO3: Assist in planning of quality assurance procedures LO4: Implement quality assurance procedures LO5: Monitor quality of work outcome	
MODULE CONTENT LO1.Establish quality specifications for product. 1.1 Identifying Market specifications 1.2 Developing Quality specifications 1.3 Documenting and introducing Quality specification 1.4 Updating Quality specifications LO2: Identify hazards and critical control points 2.1 Identifying Critical control points impacting on quality. 2.2 Determining Degree of risk for each hazard.	



2.3. Accomplishing Necessary documentation

LO3. Assist in planning of quality assurance procedures

3.1 Developing Procedures for control point.

3.2 Minimizing Hazards and risks

3.3 Developing Processes to monitor the effectiveness of quality assurance procedures

LO4: Implement quality assurance procedures

4.1 Allocating Responsibilities for carrying out quality assurance procedure

4.2 Preparing instructions

4.3 Giving Induction training on the quality assurance policy.

4.4 Safety **procedures**. training

LO5: Monitor quality of work outcome

5.1 Identifying quality requirements

5.2 Inspecting Inputs to meet quality requirements

5.3 Conducting Work outcomes

5.4 Monitoring Work processes

5.5 Adjusting Processes to maintain outputs

LO6: Participate in maintaining and improving quality at work

6.1. Monitoring Work area, materials, processes and product.

6.2. Identifying and reporting Non-conformance in inputs, process and product.

6.3. Taking Corrective action to maintain quality standards

6.4. Raising Quality issues.

LO7: Report problems that affect quality

7.1 Recognizing quality problems.

7.2 Identifying Instances of variation in quality

7.3 Reporting potential problems.



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in <u>Brail format</u> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop



Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	work		with other group member ❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	<ul style="list-style-type: none"> ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges



Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment
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ASSESSMENT CRITERIA:

LO1: Establish quality specifications for product

- Market specifications are **sourced** and **legislated requirements** identified.
- Quality specifications are developed and agreed upon.
- Quality specifications are documented and introduced to organization staff / personnel in accordance with the organization policy.
- Quality specifications are updated when necessary.

LO2: Identify hazards and critical control points

- Critical control points impacting on quality are identified.
- Degree of risk for each hazard is determined.
- Necessary documentation is accomplished in accordance with organization quality procedures

LO3: Assist in planning of quality assurance procedures

- Procedures for each identified control point are developed to ensure optimum quality.
- Hazards and risks are minimized through application of appropriate controls.
- Processes are developed to monitor the effectiveness of quality assurance procedures.

LO4: Implement quality assurance procedures

- Responsibilities for carrying out procedures are allocated to staff and contractors.
- Instructions are prepared in accordance with the enterprise's quality assurance program.
- Staff and contractors are given induction training on the quality assurance policy.
- Staff and contractors are given in-service training relevant to their allocated safety procedures.

LO5: Monitor quality of work outcome

- Quality requirements are identified.
- Inputs are inspected to confirm capability to meet quality requirements.
- Work is conducted to produce required outcomes.

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- Work processes are monitored to confirm quality of output and/or service.
- Processes are adjusted to maintain outputs within specification.

LO6: Participate in maintaining and improving quality at work

- Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements.
- Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements.
- Corrective action is taken within level of responsibility, to maintain quality standards.
- Quality issues are raised with designated personnel.

LO7: Report problems that affect quality

- Potential or existing quality problems are recognized.
- Instances of variation in quality are identified from specifications or work instructions.
- Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.



ANNEX: RESOURCE REQUIREMENT				
AGR AHC4M19 0921:Establishing quality standard				
No	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	Text books	Books Related to topics	5	1:5
2.	TTLM	Teacher Guide	25	1:1
B.	Learning Facilities & Infrastructure			
1	Well-equipped Audio visual room	8 x 5 sqm	1	1:25
2.	Demonstration site	Clinic	1	1:25
3	Well-equipped Lecture rooms (with tables, chairs and whiteboard)	8 x 5 sqm	1	1:25
4	School Bus	Comfortable for 25 trainee	1	1:25
C.	Consumable Materials			
5	Note pads, Pens, Marker	Pack		As required
D.	Tools and Equipment's			



2	Printer	Colored/mono	1	1:25
3.	Laptop	Toshiba core i 7	1	1:25
4.	LCD	Standard	1	1:25



LEARNING MODULE 20	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level- IV
MODULE TITLE:	Planning and Organizing work
MODULE CODE:	AGR AHC4 M20 0921
NOMINAL DURATION :	25 Hours
MODULE DESCRIPTION: This Module covers the knowledge, skills and attitude required in planning and organizing work activities in a production application. It may be applied to a small independent operation or to a section of a large organization.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1: Set objectives LO2: Plan and schedule work activities LO3: Implement work plans LO4: Monitor work activities LO5: Review and evaluate work plans and activities	
MODULE CONTENT LO1: Set objectives 1.1. Planning objectives 1.2. Stating objectives. 1.3. Reflecting support and commitment of team members 1.4. Identifying realistic and attainable objectives LO2: Plan and schedule work activities. 2.1. Identifying and prioritizing tasks/work activities. 2.2. Breaking down tasks/work activities	



- 2.3. Assigning task/work activities
- 2.4. Allocating resources
- 2.5. Coordinating schedule of work activities

LO3. Implement work plans

- 3.1. Identifying work methods and practices
- 3.2. Implementing work plans with set time frames, resources and standards

LO4. Monitor work activities

- 4.1. Monitoring and comparing work activities
- 4.2. Monitoring work performance
- 4.3. Reporting deviations from work activities
- 4.4. Coordinating recommendations
- 4.5. Complying reporting requirements
- 4.6. Observing timeliness of report
- 4.7. Establishing and maintaining files

LO5. Review and evaluate work plans and activities

- 5.1. Reviewing work plans, strategies and implementation
- 5.2. Doing review on outcomes of work plans and reliable feedback.
- 5.3. Providing results of review
- 5.4. Conducting performance appraisal
- 5.5. Preparing and documenting performance appraisal report
- 5.6. Preparing and presenting recommendations
- 5.7. Implementing feedback mechanisms





LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines • Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)



Group discussion	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member • 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member • Inform the group members to speak loudly 	❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> • Use sign language interpreter • Provide briefing /orientation on the assignment • Provide visual recorded material 	<ul style="list-style-type: none"> • Provide briefing /orientation on the assignment • Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges



Written test	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> • Use sign language interpreter • Brief on the instruction of the exam • Provide activity-based/ practical assessment method • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Brief on the instruction of the exam • Use loud voice • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Conduct close follow up • Time extension •



ASSESSMENT CRITERIA

LO1. Set objectives

- Objectives are planned consistent with and linked to work activities in accordance with organizational aims.
- Objectives are stated as measurable targets with clear time frames.
- Support and commitment of team members are reflected in the objectives.
- Realistic and attainable objectives are identified.

LO2. Plan and schedule work activities

- Tasks/work activities to be completed are identified and prioritized as directed.
- Tasks/work activities are broken down into steps in accordance with set time frames and achievable components.
- Task/work activities are assigned to appropriate team or individuals in accordance with agreed functions.
- Resources are allocated as per requirements of the activity.
- Schedule of work activities is coordinated with personnel concerned.

LO3. Implement work plans

- Work methods and practices are identified in consultation with personnel concerned.
- Work plans are implemented in accordance with set time frames, resources and standards.

LO4. Monitor work activities

- Work activities are monitored and compared with set objectives.
- Work performance is monitored.
- Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set



standards.

- Reporting requirements are complied with in accordance with recommended format.
- Timeliness of report is observed.
- Files are established and maintained in accordance with standard operating procedures.

LO5. Review and evaluate work plans and activities

- Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.
- Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.
- Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.
- Performance appraisal is conducted in accordance with organization rules and regulations.
- Performance appraisal report is prepared and documented regularly as per organization requirements.
- Recommendations are prepared and presented to appropriate personnel/authorities.
- Feedback mechanisms are implemented in line with organization policies.



Annex: Resource Requirements

AGR APR4 M20 0921: Planning and Organizing Work

Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Textbook		25	1:1
3	Reference book		1	1:25
4	Journals/manuals		1	1:25
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	6m*7m	1	1:25
2	Library	10m*10m	1	1:25
C.	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Flip chart	Rim	5 rim	1:5
3	White board	1m X 1.5m	1	1:25
4	Markers	No	25	1:1
D.	Tools and Equipment			
1	Communication tools		5	1:5



LERNING MODULE 21

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Migrating to New Technology
MODULE CODE :	AGR AHC4 21 0921
NOMINAL DURATION :	25 Hours

MODULE DESCRIPTION : This module aims to provide the trainees to apply skills and knowledge in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:

LO1: Apply existing knowledge and techniques to technology and transfer

LO2: Apply functions of technology to assist in solving organizational problems

LO3: Evaluate new or upgraded technology performance

MODULE CONTENTS

LO1. Apply existing knowledge and techniques to technology and transfer

- 1.1. Identifying existing knowledge for developing new skills
- 1.2. Reacquiring and using new or upgraded technology skills
- 1.3. Identifying, classifying and using new or upgraded equipment

LO2. Apply functions of technology to assist in solving organizational problems

- 2.1. Conducting test for new or upgraded equipment
- 2.2. Applying features of new or upgraded equipment
- 2.3. Using features and functions of new or upgraded equipment
- 2.4. Accessing and using sources of information relating to new or upgraded equipment



LO3. Evaluate new or upgraded technology performance

- 3.1. Evaluating new or upgraded equipment
- 3.2. Determining environmental considerations from new or upgraded equipment
- 3.3. Seeing feedback from users appropriate



LEARNING METHODS:				
For None ImairedTrainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture- discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<ul style="list-style-type: none"> • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 			on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up



				<ul style="list-style-type: none"> • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



	process		process/ practical training	
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration /Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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Assessment Criteria

LO1. Apply existing knowledge and techniques to technology and transfer

- Exist knowledge for developing new skills is identified
- New or upgraded technology skills is reacquired and used
- New or upgraded equipments are identified, classified and used

LO2. Apply functions of technology to assist in solving organizational problems

- Testing of new or upgraded equipment is conducted
- Features of new or upgraded equipment is applied
- Features and functions of new or upgraded equipment is used
- Sources of information relating to new or upgraded equipment is accessed and used

LO3. Evaluate new or upgraded technology performance

- New or upgraded equipment is evaluated
- Environmental considerations is determined from new or upgraded equipment
- Feedback seen from appropriate users





Annexes: Resource Requirements

Module Code and Title: AGR AHC4M22 0921Migrating to New Technology				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	To be prepared by trainer	25	1:1
2.	Textbooks	<ul style="list-style-type: none"> • Merk veterinary manual 8th edition • Veterinary Pharmacology and therapeutics 8th ed. 2000. R. H. Adams Black well publishers • Veterinary clinical diagnosis. 2000. R. Kelly • Veterinary microbiology. P.J. Quinin M. E. Cartey, B.Markey and G. R. Carter 2004. 	5	1:5
3.	Reference manuals	Prepared by trainer	5	1:5
4.	Journals/Publication/Magazines	International or national journals to be download from free webs	1	1:25



5.	Computer	DELL, acer, IBM, compaque	5	1:5
6.	Different animation and graphics, soft wares	to be download from free webs	1	1:25
B.	Learning Facilities & Infrastructure			
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concrete block (5x5m ²) maintained regularly	1	1:25
2.	Library	Concrete block (5x5m ²) maintained regularly	1	1:25
3.	Veterinary clinic	Standard	1	1:25
4.	Veterinary laboratory	Standard	1	1:25
5.	Crush	Made up of metal or wood	1	1:25
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4	White board and black board	Standard	1 each	1:25
5	Chalk	Packed		
D.	Tools and Equipments			
1.	Stethoscope	Standard	5	1:5



2.	Thermometer	<ul style="list-style-type: none"> Clinical Digital 	5 5	1:5 each
3	Ultrasound	Standard	1	1:25
4	X-Ray	Standard	1	1:25
5	Anesthetic machine	Standard	1	1:25
6	Incubator	Standard	1	1:25
7	Autoclave	Standard	1	1:25
8	Biosafety cabinate	Standard	1	1:25
9	PCR-Machine	Standard	1	1:25
E	Personal protective Equipments			
1	Face mask	Standard	25	1:1
2	Gown	Standard	25	1:1
3	Glove	<ul style="list-style-type: none"> Examination glove Surgical glove Arm length glove 	2 pack 1 pack 1 pack	As required
4	Overalls	Standard	25	1:1
5	Boot	Standard	25	1:1



LERNING MODULE 22

TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Conducting Animal Health Extension Service Delivery
MODULE CODE :	AGR AHC4 22 0921
NOMINAL DURATION :	25 Hours

MODULE DESCRIPTION : This module aims to provide the trainees with the basic knowledge, skills and attitude required in conducting animal health extension service delivery activities. It will enable the person to perform awareness on locally prevailing livestock disease, community based disease control program, build a strategy to minimize risk of disease spread to new areas and advocate new technology transfer and adaptation.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know:

LO1: Perform awareness on locally prevailing livestock disease

LO2: Perform community based disease control program

LO3: Build a strategy to minimize risk of disease spread to new areas

LO4: Advocate new technology

MODULE CONTENTS

LO1. Perform awareness on locally prevailing livestock disease

1.1. Identifying information needs and expectations

1.1.1. Veterinary extension issues

1.2. Conducting awareness of the community

1.2.1. Locally prevailing disease livestock disease

1.3. Delivering information on disease sources and transmission ways

1.4. Explaining importance of animal health care and early reporting of disease occurrence

1.5. Describing economically important and zoonotic local livestock diseases



LO2. Perform community based disease control program

2.1. Conducting community participation

2.1.1. Vaccination

2.1.2. Mass treatment

2.1.3. Crush construction

2.2. Controlling disease transmission of animals at grazing and watering points

2.3. Using pictorial, post card, diagram or other demonstrable materials

2.3.1. Indicating harmful effects of the disease on animal health

2.3.2. Indicating side effects of the disease on the economy of farmers

2.4. Carrying out mobilization of community in national disease surveillance program

LO3. Build a strategy to minimize risk of disease spread to new areas

3.1. Empowering the community in prevention of disease spread to new area

3.2. Using Participatory Rural Appraisal (PRA) strategy in disease prevention

LO4. Advocate new technology

4.1. Explaining disadvantage of large number livestock rearing on small area of land

4.2. Explaining advantage of integrated and small scale farming

4.3. Integrating community indigenous knowledge in transfer of new technology

4.4. Delivering information on adding value chain to livestock and livestock product



LEARNING METHODS:				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text 	<ul style="list-style-type: none"> • Assign sign language interpret • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe



	<ul style="list-style-type: none"> ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 	<ul style="list-style-type: none"> • Present the lecture in video format • Summarize main points 		<p>impairments on their upper limbs to take note</p> <ul style="list-style-type: none"> • Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the 	<ul style="list-style-type: none"> • Use sign language interpret • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs



	<ul style="list-style-type: none"> process of guidance facilitate the support of peer trainees Prepare & use simulation 	<ul style="list-style-type: none"> Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> trainees Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> impairment to operate equipments/ machines Assign peer trainees to assist ❖ Conduct close follow up Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members Conduct close follow up Introduce the trainees with other group member 	<ul style="list-style-type: none"> Use sign language interpreters Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> Facilitate the integration of trainees with group members Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers



	❖ Brief the thematic issues of the work		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/ practical training 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the 	<ul style="list-style-type: none"> ❖ Use sign language interpret ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



	trainees to prepare and submit the assignment in soft or hard copy			
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpret • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration/Observation	<ul style="list-style-type: none"> Brief the instruction or provide them in large text/Brail Time extension 	<ul style="list-style-type: none"> Use sign language interpreter Brief on the instruction of the exam Provide activity-based/ practical assessment method Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Brief on the instruction of the exam Use loud voice Time extension 	<ul style="list-style-type: none"> Provide activity based assessment Conduct close follow up Time extension
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ASSESSMENT CRITERIA

LO1. Perform awareness on locally prevailing livestock disease

- Information needs and expectations of the community and other stakeholders are identified
- Awareness of the community on locally prevailing livestock disease is conducted
- Information on disease sources and transmission ways is delivered to the community
- Importance of animal health care and early reporting of disease occurrence is explained
- Locally available destructive, economically important and zoonotic diseases of livestock is described

LO2. Perform community based disease control program

- Community participation in the process of vaccination, mass treatment and crush construction is conducted
- Disease transmission of animals from mixing of different herds at grazing and watering points is controlled
- Pictorial, post card, diagram or other demonstrable materials is used to indicate harmful effects of the disease on animal health and the economy of farmers
- Mobilization of community in national disease surveillance program is carried out

LO3. Build a strategy to minimize risk of disease spread to new areas

- Community is empowered in prevention of disease spread to new area
- Participatory Rural Appraisal (PRA) strategy is used in disease prevention

LO4. Advocate new technology

- Disadvantage of large number of livestock rearing on small area of land explained
- Advantage of integrated and small scale farming is explained
- Indigenous knowledge in community is integrated in transfer of new technology
- Information on adding value chain on livestock and livestock product is delivered









Annexes: Resources Requirements

Module Code and Title: AGR AHC4M22 0921 Conduct Animal Health Extension Service Delivery

Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	To be prepared by trainer	25	1:1
2.	Textbooks	<ul style="list-style-type: none"> • Merk veterinary manual 8th edition • Veterinary Medicine A textbook of the diseases of cattle, Horses, sheep, pigs and goats, Radostits <i>et al</i>, 2006, 10thed. • Bovine Medicine: Diseases and Husbandry of Cattle, Andrews <i>et al</i>.(2004)2nd • Clinical Examination of Farm Animals, Jackson and Cockcroft, Blackwell Publ. (2002)1st Ed. • Dairy production medicine, Carlos <i>et al</i>, (2011) 1st Ed. • Infectious Disease of Livestock, Coetzer and Tustin. Volume one, Oxford University press, (2004) 2nd Ed. 	5	1:5



3.	Reference manuals	Prepared by trainer or organization	5	1:5
4.	Journals/Publication/Magazines	International or national journals to be download from free webs	1	1:25
5.	Computer	DELL, acer, IBM, compaque	5	1:5
6.	Different animation and graphics, soft wares	to be download from free webs	1	1:25
B.	Learning Facilities & Infrastructure			
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concrete block (5x5m ²) maintained regularly	1	1:25
2	White and black board	Standard	1 each	1:25
3	Library	Concrete block (5x5m ²) maintained regularly	1	1:25
4	Veterinary clinic	Standard	1	
5	Veterinary laboratory	Standard	1	
6	Crush	Made up of metal or wood	1	
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5



2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4	Chalk	Standard		As required
5	Gauze	Medical grade sterile cotton gauze	5 roll	As required
6	Cover slips	Packed		As required
7	Nasal Swabs	Packed		As required
8	Microscopic Slides	Packed		As required
9	Alcohol 78%	Standard		As required
10	Savlon 70% and 90%	Standard		As required
11	Lubricant	Standard		As required
D.	Tools and Equipments			
1.	Stethoscope	Standard	5	1:5
2.	Thermometer	<ul style="list-style-type: none"> Clinical Digital 	5 5	1:5 each
3	Treatment syringe	Disposable syringe 1ml, 3ml, 5ml, 10ml and 20ml Re-usable syringe 10ml and 20ml	1 pack each ml	As required
4	Automatic vaccination syringe	Standard	5	1:5
5	Needle	16 gauge	5	As required



		18 gauge	5	
		22 gauge	5	
6	Hammer and pleximeter	Standard	5	1:5
7	Stomach tube	Plastic	5	1:5
E	Personal Protective Equipments			
1	Face mask	Standard	25	1:1
2	Gown	Standard	25	1:1
3	Glove	<ul style="list-style-type: none"> • Examination glove • Surgical glove • Arm length glove 	2 pack 1 pack 1 pack	As required
4	Overalls	Standard	25	1:1
5	Boot	Standard	25	1:1
6	Head protection	Standard	25	1:1





LEARNING MODULE 23

TVET-PROGRAM TITLE: Animal Health Care Service, Level IV

MODULE TITLE: Supervising Animal Health Programs

MODULE CODE: AGR AHC4 M230921

NOMINAL DURATION: 45 Hours

MODULE DESCRIPTION: This aims to provide the trainees with the basic knowledge, attitudes and skills required in supervising Animal Health Programs.

LEARNING OUTCOMES

At the end of the lesson the trainee will be able to know

LO1: Monitor and assess animal health

LO2: Facilitate the participation of workers in animal welfare compliance

LO3: Implement and monitor enterprise animal welfare procedures

LO4: Implement preventative health strategies

LO5: Record and review the animal health program

MODULE CONTENTS:

LO1: Monitor and assess animal health

1.1 Identify and implementing workplace OHS hazards

1.1.1 Assessment and suitable controls of risk

1.2 Taking and observing to assess animals health conditions regularly

1.2.1. Checking the general condition and health of animal

1.2.2. Cleaning and disinfecting farms and farms premises

1.3 Recognize and report the symptoms of illness

1.3.1 Identify common diseases (infectious and non-infectious)

1.3.2 Identify parasite infestations

1.4 Carry out and arrange sampling to testing internal parasites or other infectious diseases

1.5 Referring and advice immediately unusual or suspected exotic disease outbreaks



1.6 Report the notifiable diseases

1.6.1 Comply all restrictions and treatment requirements

1.7 Record animal welfare status

1.8 Dispose the dead animals at appropriate place and manner

LO2: Facilitate the participation of workers in animal welfare compliance

2.1 Implement and monitor animal welfare programs

2.2 Implement and monitor the full range of livestock service

2.3 Describe and report the animal welfare hazards, risks and taking actions

2.3.1 Identifying hazardous that influence animal welfare

2.3.2 assessment of risk at workplace or farm

2.3.3 Suitable control and take action of risks

2.4 Resolve an issues raised on animal welfare

2.4.1 Taking an appropriate personnel resolution in workplace

LO3: Implement and monitor enterprise animal welfare procedures

3.1 Potential or Existing Animal Welfare Problem

3.2 Monitor regular to control animal welfare risks

3.3 Identify and report to manage inadequacies in allocation of animal welfare

LO4: Implement preventative health strategies

4.1 Identify the risks of animal health and strategic source of service plan

4.2 Develop and implement a vaccination program to control viral and other diseases

4.3 Identify livestock prone from internal parasite build up and treat timely

4.4 Implement the strategies and rotations of different classes of livestock on pastures

4.5 Plan the health treatments for animals using an integrated approach

4.6 Use the method of animals diseases prevention and control



4.6.1 Drenching

4.6.2 Vaccination

4.6.3 Dipping

4.7 Rotate and groups drench to minimize the risk of parasite load

LO 5: Record and review the animal health program

5.1 Record the treatment types and maintain stock medicine inventory

5.2 Record the health issues and the result of tissues, organ and blood samples

5.3 Use the record of health tests and animal health treatments

5.3.1 Recording animal health service

5.3.2 Reviewing animal health plans

5.4 Retrieve and record epidemiological disease pattern

LEARNING STRATEGIES

4. Demonstration

5. Practical and hand to work

6. Lecture and discussion

MODULE ASSESSMENT

3 Assessment Methods

- Practical assessment by direct observation of tasks through simulation/Role-plays
- Case studies
- Written exam/test on underpinning knowledge
- questioning or interview on underpinning knowledge
- project-related conditions (real or simulated)
- Certificate from training providers or employers

4 Assessment schedule outcome

- Assessment will be conducted in each learning outcome and the trainee will attach to the enterprises for cooperative training, propose real or simulated project will be



appraised at the end of the module.

5 Assessment Conditions

- The participant will have access to fully equipped work place or clinic materials, equipment necessary and consumable materials.

Assessment Criteria

LO1: Monitor and assess animal health

- OHS hazards are identified, risk assessed and suitable controls implemented.
- Regular observations are taken to assess animals' health condition according to the requirements of the organization.
- Symptoms of ill health and common diseases or parasite infestations are recognized and reported according to enterprise requirements.
- Sampling is carried out and testing arranged for internal parasites or other infectious diseases.
- Unusual or suspected exotic disease outbreaks are referred for veterinary advice immediately.
- Notifiable diseases are reported and all restrictions and treatment requirements are complied with.
- Animal welfare status is recorded according to enterprise and legislative requirements.
- Deceased animals are disposed of according to organizational and environmental policies.

LO2: Facilitate the participation of workers in animal welfare compliance

- Enterprise procedures for compliance on animal welfare programs are implemented and monitored.
- Procedures whereby workers/farmers report animal welfare hazards, risks and



action taken to control risks, are clearly described to the work group.

- Issues raised on animal welfare are dealt with and resolved promptly or referred to the appropriate personnel for resolution in accordance with workplace procedures.

LO3: Implement and monitor enterprise animal welfare procedures

- Existing and potential hazards to animal welfare which are identified and reported so that effective remedial measures are implemented.
- Work procedures to control animal welfare risks are implemented by the work group and regular monitoring occurs to ensure ongoing adherence and effectiveness of animal practices.
- Inadequacies in allocation of resources to ensure animal welfare are identified and reported to management.

LO4: Implement preventative health strategies

- Risks to animal health are identified, and strategies sourced, from the service plan.
- A vaccination program is developed and implemented to control viral and other diseases.
- Livestock prone to internal parasite build up are identified and the timing of treatments is planned out.
- Strategies are implemented based around pasture spelling and rotations of different classes of livestock.
- The health treatments for animals are planned using an integrated approach.
- Drenches, vaccines and other stock medications are used according to manufacturer instructions and withholding periods are complied with.
- Drench groups are rotated to minimize the risk of parasite resistance.

LO5: Record and review the animal health program

- All treatments are recorded and an inventory is maintained of stock medicines.
- Health issues are recorded and the results of tissue, organ and/or blood samples



are recorded if applicable.

- Records of health tests and animal health treatments, including animal service records, are used to review the animal health plan.
- Epidemiological disease pattern is retrieved from recorded data

RESOURCE REQUIREMENTS (Annex)

Module Code and Title: AGR AHC4 M23 2021

Supervising Animal Health Programs

Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	Reference books	Text book of animal nutrition, <ul style="list-style-type: none"> • Animal nutrition science, G. M. Dryden, CABi publishers • Animal nutrition, P.Mcdonnel, J.P.F. Greenhalgh, C.A. Morgan. CABi publishers. • Farm animal Metabolism and nutrition, J.P.F. D'Mello, CABi publishers 	5	1:5
2	Reference manuals	To be prepared by the trainer	5	1:5
3	TTLM	To be prepared by the trainer	5	1:5
4	Written and graphical illustration	To be prepared by the trainer	5	1:5
5	Bulletins, Data sheet, Diagrams, sketches	To be prepared by the trainer or organisation	5	1:5
6	Researches	International or national journals	5	1:5
7	Computer	DELL, acer, IBM, compaque	5	1:5
8	Different animation and graphics, soft wares (optional)	To be download from free webs	1	1:25



B. LEARNING FACILITIES & INFRASTRUCTURE				
1.	Virtual library with multimedia equipment(LCD project, Television, software and CD)	Concrete block (144m2 maintained regularly)	1	1:25
2.	Well-equipped Computer Room	Concrete block (100m2 maintained regularly)	1	1:25
3	Farm (Shoat farm, dairy and beef farm, poultry farm)	Free lounge area, milking paddock, feeding And watering trough, tethering space, Maternity pen, separate yearling pen, calve pen, milking pen, Crush, Waste disposal pit, feed store, isolation pen, foot bath, quarantine pen, hay shade,feed store dipping tank.	1	1:25
4	Open air clinic	That meets the requirements of the federal legislation for privet clinics	1	1:25
5	Abattoir (cooperative training)		1	1:25
6	Quarantine posts		1	1:25
7	Well-equipped lecture room (with tables, chairs, White board)	Concrete block (64m ² maintained regularly)	1	1:25
8	Laboratory room equipped with benches and Tables	Concrete block (169 m ² maintained regularly)	1	1:25
C. CONSUMABLE MATERIALS				
1.	Chemicals	<ul style="list-style-type: none"> Detergents (House hold bleach, Soap, EDTA sodium, NaHCO₄) Disinfectants (Formalin, Ethyl alcohol, Isopropyl alcohol Glutaraldehyde, hydrogen peroxide and 		As required



		<ul style="list-style-type: none"> potassium permanganase) Urea 		
2.	Drug	<ul style="list-style-type: none"> Antihelmentics calcium boro gluconate, antimicrobials injectables 		As required
3	Feed materials	<ul style="list-style-type: none"> Whole feed materials Hay Straw Pasture if available Silage if available Crop by-product Feed supplements like minerals, vitamins 		As required
4	Gauze	Medical grade sterile cotton gauze		As required
5	Permanent record sheet		5	1:5
6	Diagnosing kits	<ul style="list-style-type: none"> Mastitis kit Rose Bengal plate test kit Tuberculin (purified protein derivatives) Blotting paper 		As required
7	Scalpel	Blade number 11-25		As required
8	Cotton	Medical grade sterile cotton		As required
9	Plasters	Medical grade sterile Plaster		As required
10	Examination glove	Latex glove		As required
11	Disposable needle and syringes	Medical grade sterile cotton gauze		As required
12	Urea	To treat feed		As required
D	Tools and equipment's			
1.	Restraining materials	<ul style="list-style-type: none"> Bull holder Nose ring 		As required



		<ul style="list-style-type: none"> • Rope and chains • Shackles • Insecticide impregnated collar • Kennels 		
2.	Personal protecting equipments	Boots, hats/hard hat, overalls, gloves, protective eyewear, hearing protections, respirator or face mask, sun protection (sun hat, sun screen), and leather glove.		As required
3	Heavy duty balance	<ul style="list-style-type: none"> • Weighing capacity 50 Kg – 2000Kg • Wall mounted 	1	1:30
4	Milking cans	<ul style="list-style-type: none"> • Aluminum can 5Liter 	5	1:5
5	Milking machine		5	1:5
6	Hoof trimmer and hoof Knife	Standard size	5	1:5
7	Burdizzo	<ul style="list-style-type: none"> • Ovine burdizzo • Bovine burdizzo 	5	1:5
8	Cleaning materials	Buckets, spades, blooms,		As required
9	Grinding mills	Heavy duty grinding mill With electric power supply	1	1:25
10	Feed mixers	Heavy duty grinding mill With electric power supply	1	1:25
11	Liquid nitrogen tank	10 Liter capacity	1	1:25
12	Dehorning wire and Saw	Standard size	1	1:25
13	Feed store	Concrete block	1	1:25
14	Hay shade	With rain protecting roof	1	1:25
15	Pig holder	Standard size	1	1:25
16	Nose ring	Standard size	1	1:25
17	Drenching gun	Standard size	1	1:25
18	Rope and chains	Standard size	1	1:25



19	Bull holder	Standard size	1	1:25
20	Kennels	Standard size	1	1:25
21	Stomach tube	Medical grade PVC <ul style="list-style-type: none"> • 9mm internal diameter, 3m long • 11mm internal diameter, 3m long 	5	1:5
22	Naso-gastric tubes	Different sizes <ul style="list-style-type: none"> • 5Fr× 55cm • 6Fr×55cm • 6Fr×90cm • 8Fr×108cm • 8Fr×140cm 	5	1:5
23	Refrigerators	Heavy duty refrigerator Cooling capacity up to -20°C	1	1:25
24	Ice boxes	Standard size	1	1:25
25	Vaccination gun	Standard size	1	1:25
26	Microscope	<ul style="list-style-type: none"> • Compound • Stereo microscope 	1	1:25 1:25



LEARNING MODULE GUIDE 24	
TVET-PROGRAMME TITLE:	Animal Health Care Service Level 4
MODULE TITLE:	Developing and Implementing Community Programs
MODULE CODE :	AGR AHCS4M24 0921
NOMINAL DURATION :	50 Hours
MODULE DESCRIPTION: This module describes the knowledge, skills and attitude required to develop and implement community programs to ensure maximum participation.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1 Develop program parameters LO2 Design programs with the community LO3 Implement programs LO4 Evaluate programs	
MODULE CONTENT LO1 Develop Community Program Parameters 1.1. Analysing issues of wide community concern 1.1.1. Social, community and youth issues 1.1.2. Nature of community development work 1.1.3. Community' as ideological tool 1.1.4. Personal values and community development 1.1.5. Emergence of community development 1.1.6. Contemporary community development practice 1.1.7. Social movements 1.1.8. Sociology 1.1.9. Social theories 1.1.10. Social inequality 1.1.11. Sociology of class 1.1.12. Sociology of gender 1.1.13. Modern economics and politics 1.2. Undertaking and coordinating work	



1.3. Undertaking survey to identify strategies and options for action

- 1.3.1. Community/public education
- 1.3.2. Lobbying and advocacy
- 1.3.3. Non-violent direct action
- 1.3.4. Participatory action research
- 1.3.5. Development of new businesses or employment opportunities
- 1.3.6. Health promotion
- 1.3.7. Development of community resources and facilities
- 1.3.8. Development of recreational/entertainment
- 1.3.9. Strategies to increase access to facilities and services
- 1.3.10. Decision-making strategies
- 1.3.11. Public processes

1.4. Commencing, planning and liaison in consultation communities and stakeholders

LO3 Implement Programs

- 3.1. Conducting and evaluating pilot program to ensure its objectives
- 3.2. Implementing programs in accordance with the development plan
- 3.3. Developing and maintaining systems and resources for technical support
- 3.4. Encouraging target group to participate fully in the program

LO4 Evaluate Programs

- 4.1. Identifying and evaluating outcomes of program
- 4.2. Using results of evaluation for revision and ongoing development
- 4.3. Involving interested and/or relevant people are program evaluation



LEARNING METHODS:				
For None ImairedTraines	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept • Use normal tone of voice 	<ul style="list-style-type: none"> • Assign sign language interpreter • Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies • Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time • Present the lecture in video format • Summarize main points 	<ul style="list-style-type: none"> • Organize the class room seating arrangement to be accessible to trainees • Speak loudly • Ensure the attention of the trainees • Present the lecture in video format • Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. • Facilitate and support the trainees who have severe impairments on their upper limbs to take note • Provide Orientation



	<ul style="list-style-type: none"> • Encourage trainees to record the lecture in audio format • Provide Orientation on the physical feature of the work shop • Summarize main points 			on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> • Conduct close follow up • Use verbal description • Provide special attention in the process of guidance • facilitate the support of peer trainees • Prepare & use simulation 	<ul style="list-style-type: none"> • use Sign language interpreter • Use video recorded material • Ensure attention of the trainees • Provide structured training • Show clear and short method • Use gesture • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Illustrate in clear & short method • Use Video recorded material • Ensure the attention of the trainees • Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> • Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines • Assign peer trainees to assist ❖ Conduct close follow up



				<ul style="list-style-type: none"> • Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members • Conduct close follow up • Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> • Use sign language interpreters • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> • Facilitate the integration of trainees with group members • Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
Exercise	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the process/practical training • Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> • Conduct close follow up and guidance • Provide tutorial support if necessary • provide special attention in the 	<ul style="list-style-type: none"> • Assign peer trainees • Use additional nominal hours if necessary



	process		process/ practical training	
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions • Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	



ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> • Use sign language interpreter • Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter • Use short and clear questioning • Time extension 	<ul style="list-style-type: none"> • Speak loudly • Using sign language interpreter if necessary 	<ul style="list-style-type: none"> • Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> • Prepare the exam in large texts/Brail • Use interview as an option if necessary • Prepare the exam in audio format • Assign human reader (if necessary) • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, True or False, matching and short answers • Avoid essay writing • Time extension 	<ul style="list-style-type: none"> • Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> • Use oral response as an option to give answer for trainees having severe upper limb impairment • Time extension for trainees having severe upper limb impairment



Demonstration /Observation	<ul style="list-style-type: none"> • Brief the instruction or provide them in large text/Brail • Time extension 	<ul style="list-style-type: none"> • Use sign language interpreter • Brief on the instruction of the exam • Provide activity-based/ practical assessment method • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Brief on the instruction of the exam • Use loud voice • Time extension 	<ul style="list-style-type: none"> • Provide activity based assessment • Conduct close follow up • Time extension
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ASSESSMENT CRITERIA

LO1 Develop Community Program Parameters

- Issues of wide **community** concern are analyzed to develop an agency position and to ascertain the need for new program /
- Appropriate work is undertaken to ascertain support, capacity for a coordinated effort and factors which will effect provision of services
- Survey to is undertaken identify key propel, issues to be addressed, possible strategies and options for action
- Appropriate planning and liaison including developing concept plans are undertaken in consultation with relevant communities and stakeholders

LO2 Design Programs with the Community

- A program plan which reflects identified parameters and incorporates an evaluation of a range of program optionsis developed
- Consultation is undertaken to determine preferred program options particularly in areas of high need or with targeted communities
- Help is sought from participating agencies for implementation arrangements
- Resources are identified and sought

LO3 Implement Programs

- Where appropriate, pilots are conducted and evaluated and adjustments made to ensure the program achieves its objectives
- Programs are implemented in accordance with the development plan
- Systems and resources are developed and maintained for technical support to community programs
- Target group is encouraged to participate fully in the program

LO4 Evaluate Programs

- Program design and outcomes are evaluated according to criteria and specifications identified in the program plan



- Results of evaluation are used for revision and ongoing development
- Interested and/or relevant people are involved in program evaluation



Annex Resource Requirements

AGR AHCS4M24 09 21: Developing and Implementing Community Programs				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	By trainers	25	1:1
2.	Journals/Publication/Magazines	Journal 2018Vol 2.	25	1:1
3.	Books	<ul style="list-style-type: none"> Hand book on Integrated community development seven D approach to community capacity development 	5	1:5
4.	Manuals	<ul style="list-style-type: none"> Program development Organizational effectiveness model manual The role of community participation in development planning and project management manual 	5 each	
B.	Learning Facilities & Infrastructure			
1.	Lecture Room	Standard	1	1:25
2.	Library	Standard	1	1:25
3.	Work station	Equipped with household facility and hand wash basin Standard	1	1:25
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Pencil	HB	5	1:5
3.	Pen	Ball point	5	1:5
4.	Marker	Pack	1	
5.	Filip chart	Pack	1	



D.	Tools and Equipments			
1.	Whiteboard	Magnetic whiteboard with mobile stand Wall thickness of iron stand is 1.2mm	1	1:25
2.	Duster	Standard	1	
3.	Laptop	Ram 2, hard disk 500 GB	1	1:25
4.	LCD projector	SD cards, HDMI, VGA and AV compatibility	1	1:25
5.	Telephone	Standard	5	1:5
6.	Blackboard	Standard	1	1:25
7.	Brail	Standard	25	1:1
9.	Audio-video	Standard	1	1:25