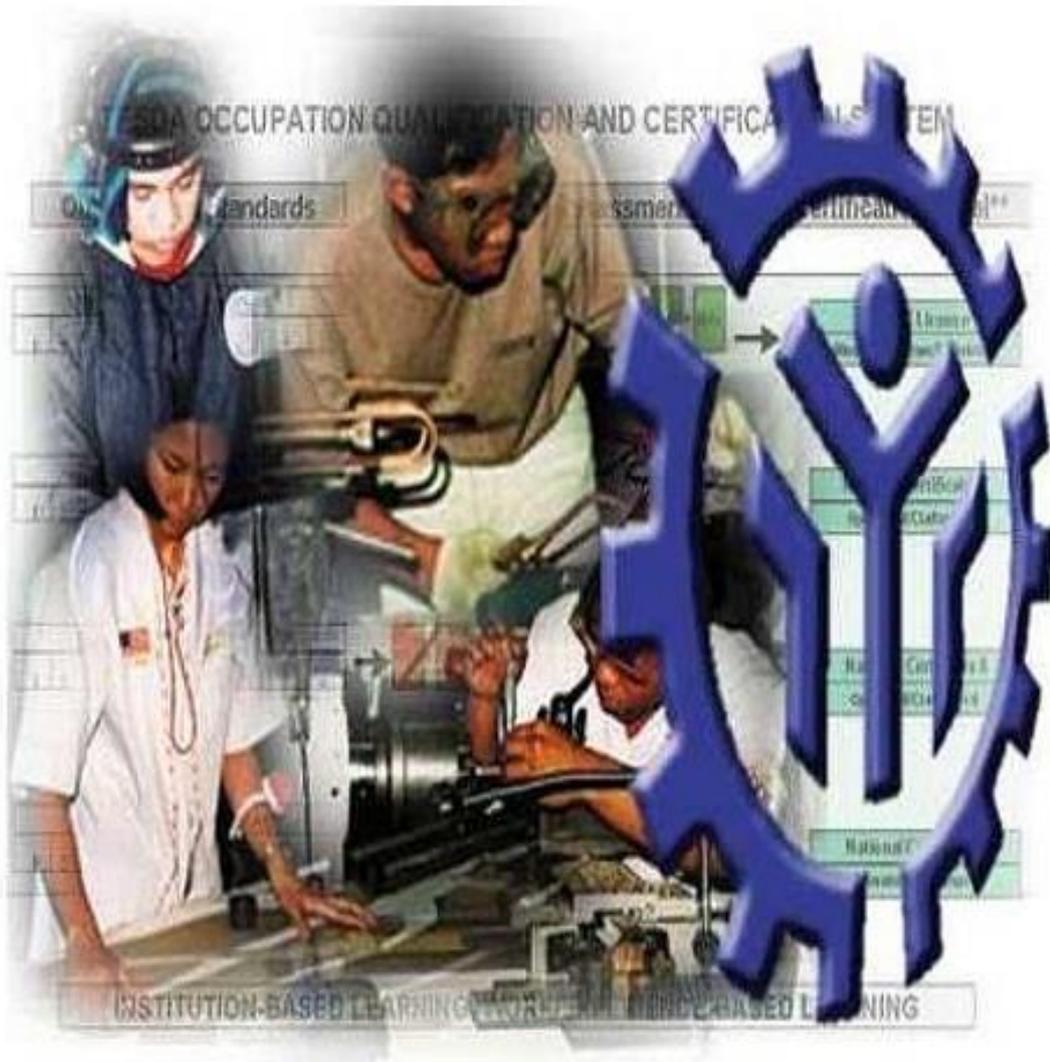


TRAINING REGULATIONS



ANIMAL HEALTH CARE AND MANAGEMENT NC III

AGRICULTURE AND FISHERY SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Superhighway, Taguig City, Metro Manila

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AGRI-FISHERY SECTOR

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TRAINING REGULATIONS FOR ANIMAL HEALTH CARE AND MANAGEMENT NC III

Section 1 ANIMAL HEALTH CARE AND MANAGEMENT NC III QUALIFICATION

The **ANIMAL HEALTH CARE AND MANAGEMENT NC III** Qualification consists of competencies that a person must achieve in providing livestock health care in both backyard and commercial livestock farms under the supervision of a veterinarian.

This Qualification is packaged from the competency map of the Agri-Fishery Sector as shown in Annex A.

The units of competency comprising this qualification include the following:

Code	BASIC COMPETENCIES
500311109	Lead workplace communication
500311110	Lead small teams
500311111	Develop and practice negotiation skills
500311112	Solve problems related to work activities
500311113	Use mathematical concepts and techniques
500311114	Use relevant technologies

Code	COMMON COMPETENCIES
AGR321201	Apply safety measures in farm operations
AGR321202	Use farm tools and equipment
AGR321203	Perform estimation and calculations

Code	CORE COMPETENCIES
AGR321301	Restrain and handle animal
AGR321302	Apply bio-security measures
AGR321303	Administer drugs and biologics
AGR321304	Handle and store drugs and biologics
AGR321305	Collect and handle specimen

A person who has achieved this Qualification is competent to be:

- **Livestock Health Technician**

SECTION 2

COMPETENCY STANDARDS

These guidelines are set to provide the Technical Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for **ANIMAL HEALTH CARE AND MANAGEMENT NC III**.

BASIC COMPETENCIES

UNIT OF COMPETENCY : LEAD WORKPLACE COMMUNICATION

UNIT CODE : 500311109

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to lead in the dissemination and discussion of ideas, information and issues in the workplace.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Communicate information about workplace processes	1.1 Appropriate communication method is selected 1.2 Multiple operations involving several topics areas are communicated accordingly 1.3 Questions are used to gain extra information 1.4 Correct sources of information are identified 1.5 Information is selected and organized correctly 1.6 Verbal and written reporting is undertaken when required 1.7 Communication skills are maintained in all situations
2. Lead workplace discussions	2.1 Response to workplace issues are sought 2.2 Response to workplace issues are provided immediately 2.3 Constructive contributions are made to workplace discussions on such issues as production, quality and safety 2.4 Goals/objectives and action plan undertaken in the workplace are communicated

3. Identify and communicate issues arising in the workplace	3.1 Issues and problems are identified as they arise 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication 3.3 Dialogue is initiated with appropriate personnel 3.4 Communication problems and issues are raised as they arise
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RANGE OF VARIABLES

VARIABLE	RANGE
1. Methods of communication	1.1 Non-verbal gestures 1.2 Verbal 1.3 Face to face 1.4 Two-way radio 1.5 Speaking to groups 1.6 Using telephone 1.7 Written 1.8 Internet

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Dealt with a range of communication/information at one time 1.2 Made constructive contributions in workplace issues 1.3 Sought workplace issues effectively 1.4 Responded to workplace issues promptly 1.5 Presented information clearly and effectively written form 1.6 Used appropriate sources of information 1.7 Asked appropriate questions 1.8 Provided accurate information
<p>2. Underpinning knowledge</p>	<ul style="list-style-type: none"> 2.1 Organization requirements for written and electronic communication methods 2.2 Effective verbal communication methods
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1 Organize information 3.2 Understand and convey intended meaning 3.3 Participate in variety of workplace discussions 3.4 Comply with organization requirements for the use of written and electronic communication methods
<p>4. Resource Implications</p>	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 4.1 Variety of Information 4.2 Communication tools 4.3 Simulated workplace
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 5.1 Competency in this unit must be assessed through 5.2 Direct Observation 5.3 Interview
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1 Competency may be assessed in the workplace or in simulated workplace environment 6.2 Assessment shall be observed while task are being undertaken whether individually or in-group

UNIT OF COMPETENCY : LEAD SMALL TEAMS

UNIT CODE : 500311110

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes to lead small teams including setting and maintaining team and individual performance standards.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Provide team leadership	1.1 Work requirements are identified and presented to team members 1.2 Reasons for instructions and requirements are communicated to team members 1.3 Team members' queries and concerns are recognized, discussed and dealt with
2. Assign responsibilities	2.1 Duties, and responsibilities are allocated having regard to the skills, knowledge and aptitude required to properly undertake the assigned task and according to company policy 2.2 Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible
3. Set performance expectations for team members	3.1 Performance expectations are established based on client needs and according to assignment requirements 3.2 Performance expectations are based on individual team members duties and area of responsibility 3.3 Performance expectations are discussed and disseminated to individual team members

<p>4. Supervise team performance</p>	<p>4.1 Monitoring of performance takes place against defined performance criteria and/or assignment instructions and corrective action taken if required</p> <p>4.2 Team members are provided with feedback, positive support and advice on strategies to overcome any deficiencies</p> <p>4.3 Performance issues which cannot be rectified or addressed within the team are referenced to appropriate personnel according to employer policy</p> <p>4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction</p> <p>4.5 Team operations are monitored to ensure that employer/client needs and requirements are met</p> <p>4.6 Follow-up communication is provided on all issues affecting the team</p> <p>4.7 All relevant documentation is completed in accordance with company procedures</p>
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RANGE OF VARIABLES

VARIABLE	RANGE
1. Work requirements	1.1 Client Profile 1.2 Assignment instructions
2. Team member's concerns	2.1 Roster/shift details
3. Monitor performance	3.1 Formal process 3.2 Informal process
4. Feedback	4.1 Formal process 4.2 Informal process
5. Performance issues	5.1 Work output 5.2 Work quality 5.3 Team participation 5.4 Compliance with workplace protocols 5.5 Safety 5.6 Customer service

EVIDENCE GUIDE

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Maintained or improved individuals and/or team performance given a variety of possible scenario 1.2 Assessed and monitored team and individual performance against set criteria 1.3 Represented concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf 1.4 Allocated duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed 1.5 Set and communicated performance expectations for a range of tasks and duties within the team and provided feedback to team members
2. Underpinning Knowledge	<ul style="list-style-type: none"> 2.1 Company policies and procedures 2.2 Relevant legal requirements 2.3 How performance expectations are set 2.4 Methods of Monitoring Performance 2.5 Client expectations 2.6 Team member's duties and responsibilities

3. Underpinning Skills	<p>3.1 Communication skills required for leading teams</p> <p>3.2 Informal performance counseling skills</p> <p>3.3 Team building skills</p> <p>3.4 Negotiating skills</p>
4. Resource Implications	<p>The following resources MUST be provided:</p> <p>4.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</p> <p>4.2 Materials relevant to the proposed activity or task</p>
5. Methods of Assessment	<p>Competency may be assessed through:</p> <p>5.1 Direct observations of work activities of the individual member in relation to the work activities of the group</p> <p>5.2 Observation of simulation and/or role play involving the participation of individual member to the attainment of organizational goal</p> <p>5.3 Case studies and scenarios as a basis for discussion of issues and strategies in teamwork</p>
6. Context of Assessment	<p>6.1 Competency assessment may occur in workplace or any appropriately simulated environment</p> <p>6.2 Assessment shall be observed while task are being undertaken whether individually or in-group</p>

UNIT OF COMPETENCY: DEVELOP AND PRACTICE NEGOTIATION SKILLS

UNIT CODE : 500311111

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to collect information in order to negotiate to a desired outcome and participate in the negotiation.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Plan negotiations	1.1 Information on <i>preparing for negotiation</i> is identified and included in the plan 1.2 Information on creating <i>non verbal environments</i> for positive negotiating is identified and included in the plan 1.3 Information on <i>active listening</i> is identified and included in the plan 1.4 Information on different <i>questioning techniques</i> is identified and included in the plan 1.5 Information is checked to ensure it is correct and up-to- date
2. Participate in negotiations	2.1 Criteria for successful outcome are agreed upon by all parties 2.2 Desired outcome of all parties are considered 2.3 Appropriate language is used throughout the negotiation 2.4 A variety of questioning techniques are used 2.5 The issues and processes are documented and agreed upon by all parties 2.6 Possible solutions are discussed and their viability assessed 2.7 Areas for agreement are confirmed and recorded 2.8 Follow-up action is agreed upon by all parties

RANGE OF VARIABLES

VARIABLE	RANGE
1. Preparing for negotiation	1.1 Background information on other parties to the negotiation 1.2 Good understanding of topic to be negotiated 1.3 Clear understanding of desired outcome/s 1.4 Personal attributes 1.4.1 self awareness 1.4.2 self esteem 1.4.3 objectivity 1.4.4 empathy 1.4.5 respect for others 1.5 Interpersonal skills 1.5.1 listening/reflecting 1.5.2 non verbal communication 1.5.3 assertiveness 1.5.4 behavior labeling 1.5.5 testing understanding 1.5.6 seeking information 1.5.7 self disclosing 1.6 Analytic skills 1.6.1 observing differences between content and process 1.6.2 identifying bargaining information 1.6.3 applying strategies to manage process 1.6.4 applying steps in negotiating process 1.6.5 strategies to manage conflict 1.6.6 steps in negotiating process 1.6.7 options within organization and externally for resolving conflict
2. Non verbal environments	2.1 Friendly reception 2.2 Warm and welcoming room 2.3 Refreshments offered 2.4 Lead in conversation before negotiation begins
3. Active listening	3.1 Attentive 3.2 Don't interrupt 3.3 Good posture 3.4 Maintain eye contact 3.5 Reflective listening
4. Questioning techniques	4.1 Direct 4.2 Indirect 4.3 Open-ended

EVIDENCE GUIDE

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Demonstrated sufficient knowledge of the factors influencing negotiation to achieve agreed outcome</p> <p>1.2 Participated in negotiation with at least one person to achieve an agreed outcome</p>
2. Underpinning Knowledge and Attitude	<p>2.1 Codes of practice and guidelines for the organization</p> <p>2.2 Organizations policy and procedures for negotiations</p> <p>2.3 Decision making and conflict resolution strategies procedures</p> <p>2.4 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation</p> <p>2.5 Flexibility</p> <p>2.6. Empathy</p>
3. Underpinning Skills	<p>3.1 Interpersonal skills to develop rapport with other parties</p> <p>3.2 Communication skills (verbal and listening)</p> <p>3.3 Observation skills</p> <p>3.4 Negotiation skills</p>
4. Resource Implications	<p>The following resources MUST be provided:</p> <p>4.1 Room with facilities necessary for the negotiation process</p> <p>4.2 Human resources (negotiators)</p>
5. Methods of Assessment	<p>Competency may be assessed through:</p> <p>5.1 Observation/demonstration and questioning</p> <p>5.2 Portfolio assessment</p> <p>5.3 Oral and written questioning</p> <p>5.4 Third party report</p>
6. Context of Assessment	<p>6.1 Competency to be assessed in real work environment or in a simulated workplace setting.</p>

UNIT OF COMPETENCY : SOLVE PROBLEMS RELATED TO WORK ACTIVITIES

UNIT CODE : 500311112

UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to solve problems in the workplace including the application of problem solving techniques and to determine and resolve the root cause of problems.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Identify the problem	1.1 Variances are identified from normal operating parameters; and product quality 1.2 Extent, cause and nature are of the problem are defined through observation, investigation and analytical techniques 1.3 Problems are clearly stated and specified
2. Determine fundamental causes of the problem	2.1 Possible causes are identified based on experience and the use of problem solving tools / analytical techniques. 2.2 Possible cause statements are developed based on findings 2.3 Fundamental causes are identified per results of investigation conducted
3. Determine corrective action	3.1 All possible options are considered for resolution of the problem 3.2 Strengths and weaknesses of possible options are considered 3.3 Corrective actions are determined to resolve the problem and possible future causes 3.4 Action plans are developed identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures
4. Provide recommendation/s to manager	4.1 Report on recommendations are prepared 4.2 Recommendations are presented to appropriate personnel. 4.3 Recommendations are followed-up, if required

RANGE OF VARIABLES

VARIABLE	RANGE
1. Analytical techniques	1.1 Brainstorming 1.2 Intuitions/Logic 1.3 Cause and effect diagrams 1.4 Pareto analysis 1.5 SWOT analysis 1.6 Gantt chart, Pert CPM and graphs 1.7 Scattergrams
2. Problem	2.1 Non – routine process and quality problems 2.2 Equipment selection, availability and failure 2.3 Teamwork and work allocation problem 2.4 Safety and emergency situations and incidents
3. Action plans	3.1 Priority requirements 3.2 Measurable objectives 3.3 Resource requirements 3.4 Timelines 3.5 Co-ordination and feedback requirements 3.6 Safety requirements 3.7 Risk assessment 3.8 Environmental requirements

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Identified the problem 1.2. Determined the fundamental causes of the problem 1.3. Determined the correct / preventive action 1.4. Provided recommendation to manager <p>These aspects may be best assessed using a range of scenarios / case studies / what ifs as a stimulus with a walk through forming part of the response. These assessment activities should include a range of problems, including new, unusual and improbable situations that may have happened.</p>
<p>2. Underpinning Knowledge</p>	<ol style="list-style-type: none"> 2.1 Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 2.2 Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations <ol style="list-style-type: none"> 2.2.1 Relevant equipment and operational processes 2.2.2 Enterprise goals, targets and measures 2.2.3 Enterprise quality, OHS and environmental requirement 2.2.4 Principles of decision making strategies and techniques 2.2.5 Enterprise information systems and data collation 2.2.6 Industry codes and standards
<p>3. Underpinning Skills</p>	<ol style="list-style-type: none"> 3.1 Using range of formal problem solving techniques 3.2 Identifying and clarifying the nature of the problem 3.3 Devising the best solution 3.4 Evaluating the solution 3.5 Implementation of a developed plan to rectify the problem

4. Resource Implications	4.1 Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios / case studies / what ifs will be required as well as bank of questions which will be used to probe the reason behind the observable action.
5. Methods of Assessment	<p>Competency may be assessed through:</p> <p>5.1 Case studies on solving problems in the workplace</p> <p>5.2 Observation</p> <p>The unit will be assessed in a holistic manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations, which will include disruptions to normal, smooth operation. Simulation may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual workplace and will include walk through of the relevant competency components.</p>
6. Context of Assessment	6.1 In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.

UNIT OF COMPETENCY: USE MATHEMATICAL CONCEPTS AND TECHNIQUES

UNIT CODE : 500311113

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required in the application of mathematical concepts and techniques.

ELEMENT	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variables
1. Identify mathematical tools and techniques to solve problem	1.1 Problem areas are identified based on given condition 1.2 <i>Mathematical techniques</i> are selected based on the given problem
2. Apply mathematical procedure/solution	2.1 Mathematical techniques are applied based on the problem identified 2.2 Mathematical computations are performed to the level of accuracy required for the problem 2.3 Results of mathematical computation is determined and verified based on job requirements
3. Analyze results	3.1 Result of application is reviewed based on expected and required specifications and outcome 3.2 <i>Appropriate action</i> is applied in case of error

RANGE OF VARIABLES

VARIABLE	RANGE
1. Mathematical techniques	May include but are not limited to: 1.1 Four fundamental operations Measurements 1.2 Use/Conversion of units of measurements 1.3 Use of standard formulas
2. Appropriate action	2.1 Review in the use of mathematical techniques (e.g. recalculation, re-modeling) 2.2 Report error to immediate superior for proper action

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Identified, applied and reviewed the use of mathematical concepts and techniques to workplace problems
2. Underpinning Knowledge	2.1 Fundamental operation (addition, subtraction, division, multiplication) 2.2 Measurement system 2.3 Precision and accuracy 2.4 Basic measuring tools/devices
3. Underpinning Skills	3.1 Applying mathematical computations 3.2 Using calculator 3.3. Using different measuring tools
4. Resource Implications	The following resources MUST be provided: 4.1 Calculator 4.2 Basic measuring tools 4.3 Case Problems
5. Methods of Assessment	Competency may be assessed through: 5.1 Authenticated portfolio 5.2 Written Test 5.3. Interview/Oral Questioning 5.4. Demonstration
6. Context of Assessment	6.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY: USE RELEVANT TECHNOLOGIES

UNIT CODE : 500311114

UNIT DESCRIPTOR : This unit of competency covers the knowledge, skills, and attitude required in selecting, sourcing and applying appropriate and affordable technologies in the workplace.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Study/select appropriate technology	1.1 Usage of different technologies is determined based on job requirements 1.2 Appropriate technology is selected as per work specification
2. Apply relevant technology	2.1 Relevant technology is effectively used in carrying out function 2.2 Applicable software and hardware are used as per task requirement 2.3 Management concepts are observed and practiced as per established industry practices
3. Maintain/enhance relevant technology	3.1 Maintenance of technology is applied in accordance with the industry standard operating procedure, manufacturer's operating guidelines and occupational health and safety procedure to ensure its operative ability 3.2 Updating of technology is maintained through continuing education or training in accordance with job requirement 3.3 Technology failure/ defect is immediately reported to the concern/responsible person or section for appropriate action

RANGE OF VARIABLES

VARIABLE	RANGE
1. Technology	May include but are not limited to: 1.1 Office technology 1.2 Industrial technology 1.3 System technology 1.4 Information technology 1.5 Training technology
2. Management concepts	May include but not limited to: 2.1 Real Time Management 2.2 KAIZEN or continuous improvement 2.3 5s 2.4 Total Quality Management 2.5 Other management/productivity tools
3. Industry standard operating procedure	3.1 Written guidelines relative to the usage of office technology/equipment 3.2 Verbal advise/instruction from the co-worker
4. Manufacturer's operating guidelines/ instructions	4.1 Written instruction/manuals of specific Technology/ equipment 4.2 General instruction manual 4.3 Verbal advise from manufacturer relative to the operation of equipment
5. Occupational health and safety procedure	5.1 Relevant statutes on OHS 5.2 Company guidelines in using technology/equipment
6. Appropriate action	6.1 Implementing preventive maintenance schedule 6.2 Coordinating with manufacturer's technician

EVIDENCE GUIDE

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Studied and selected appropriate technology consistent with work requirements 1.2 Applied relevant technology 1.3 Maintained and enhanced operative ability of relevant technology
2. Underpinning Knowledge	<ul style="list-style-type: none"> 2.1 Awareness on technology and its function 2.2 Repair and maintenance procedure 2.3 Operating instructions 2.4 Applicable software 2.5 Communication techniques 2.6 Health and safety procedure 2.7 Company policy in relation to relevant technology 2.8 Different management concepts 2.9 Technology adaptability
3. Underpinning Skills	<ul style="list-style-type: none"> 3.1 Relevant technology application/implementation 3.2 Basic communication skills 3.3 Software applications skills 3.4 Basic troubleshooting skills
4. Resource Implications	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 4.1 Relevant technology 4.2 Interview and demonstration questionnaires 4.3 Assessment packages
5. Methods of Assessment	<p>Competency must be assessed through:</p> <ul style="list-style-type: none"> 5.1 Interview 5.2 Actual demonstration 5.3 Authenticated portfolio (<i>related certificates of training/seminar</i>)
6. Context of Assessment	<ul style="list-style-type: none"> 6.1 Competency may be assessed in actual workplace or simulated environment

COMMON COMPETENCIES

UNIT TITLE : **APPLY SAFETY MEASURES IN FARM OPERATIONS**

UNIT CODE : **AGR321201**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to perform safety measures effectively and efficiently. It includes identifying areas, tools, materials, time and place in performing safety measures.

ELEMENT	PERFORMANCE CRITERIA
	<i>Italicized</i> terms are elaborated in the Range of Variables
1. Determine areas of concern for safety measures	1.1 Work tasks are identified in line with farm operations 1.2 Place for safety measures are determined in line with farm operations 1.3 Time for safety measures are determined in line with farm operations 1.4 Appropriate tools, materials and outfits are prepared in line with job requirements
2. Apply appropriate safety measures	2.1 Tools and materials are used according to specifications and procedures 2.2 Outfits are worn according to farm requirements 2.3 Effectivity/shelf life/expiration of materials are strictly observed 2.4 Emergency procedures are known and followed to ensure a safe work requirement 2.5 Hazards in the workplace are identified and reported in line with farm guidelines
3. Safekeep/dispose tools, materials and outfit	3.1 Used tools and outfit are cleaned after use and stored in designated areas 3.2 Unused materials are properly labeled and stored according to manufacturers recommendation and farm requirements 3.3 Waste materials are disposed according to manufacturers, government and farm requirements

RANGE OF VARIABLES

VARIABLE	RANGE
1. Work tasks	Work task may be selected from any of the subsectors: 1.1 Animal Production 1.2 Agri-marketing 1.3 Farm Equipment
2. Place	2.1 Animal pens, cages, barns 2.2 Stock room/storage areas/warehouse 2.3 Field/farm/orchard
3. Time	3.1 Vaccination and medication period 3.2 Feed mixing and feeding 3.3 Harvesting and hauling 3.4 Cleaning, sanitizing and disinfecting 3.5 Dressing, butchering and castration
4. Tools, materials and outfits	4.1 Tools 4.1.1 Wrenches 4.1.2 Screw driver 4.1.3 Pliers 4.2 Materials 4.2.1 Bottles 4.2.2 Plastic 4.2.3 Bags 4.2.4 Syringe 4.3 Outfit 4.3.1 Masks 4.3.2 Gloves 4.3.3 Boots 4.3.4 Overall coats 4.3.5 Hat 4.3.6 Eye goggles
5. Emergency procedures	5.1 Location of first aid kit 5.2 Evacuation 5.3 Farm emergency procedures
6. Waste materials	6.1 Animal manure 6.2 Waste water 6.3 Syringes 6.4 Unused farm chemicals e.g. pesticides, chemicals, fertilizers 6.5 Expired reagents 6.6 Dead animals
7. Hazards	7.1 Chemical 7.2 Electrical 7.3 Falls

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Determined areas of concern for safety measures 1.2 Applied appropriate safety measures according to industry requirements 1.3 Prepared tools, materials and outfit needed 1.4 Performed proper disposal of used materials 1.5 Safekeep/cleaned tools, materials and outfit in designated facilities
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Safety Practices <ul style="list-style-type: none"> 2.1.1 Implementation of regulatory controls and policies relative to treatment of area and application of chemicals 2.1.2 Proper disposal of waste materials 2.2 Codes and Regulations <ul style="list-style-type: none"> 2.2.1 Compliance to health program of DOH and DENR 2.2.2 Hazard identification 2.2.3 Emergency procedures 2.3 Tools & Equipment: Uses and Specification <ul style="list-style-type: none"> 2.3.1 Masks, gloves, boots, overall coats for health protection 2.4 Maintenance <ul style="list-style-type: none"> 2.4.1 Regular check-up and repair of tools, materials and outfit before and after use
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1 Ability to recognize effective tools, materials and outfit 3.2 Ready skills required to read labels, manuals and other basic safety information
<p>4. Method of Assessment</p>	<p>Competency in this unit must be assessed through:</p> <ul style="list-style-type: none"> 4.1 Practical demonstration 4.2 Third Party Report
<p>5. Resource Implications</p>	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 5.1 Farm location 5.2 Tools, equipment and outfits appropriate in applying safety measures
<p>6. Context of Assessment</p>	<ul style="list-style-type: none"> 6.1 Assessment may occur in the workplace or in a simulated workplace or as part of a team under limited supervision

UNIT TITLE: USE FARM TOOLS AND EQUIPMENT

UNIT CODE: AGR321202

UNIT DESCRIPTOR: This unit covers the knowledge, skills and attitudes required to use farm tools and equipment. It includes selection, operation and preventive maintenance of farm tools and equipment.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Select and use farm tools	1.1 Appropriate farm tools are identified according to requirement/use 1.2 Farm tools are checked for faults and defective tools reported in accordance with farm procedures 1.3 Appropriate tools and equipment are safely used according to job requirements and manufacturers conditions
2. Select and operate farm equipment	2.1 Appropriate farm equipment are identified according to requirement/use 2.2 Instructional manual of the farm tools and equipment are carefully read prior to operation 2.3 Pre-operation check-up is conducted in line with manufacturers manual 2.4 Faults in farm equipment are identified and reported in line with farm procedures 2.5 Farm equipment is used according to its function 2.6 Safety procedures are followed according to standard operating procedures
3. Perform preventive maintenance	3.1 Tools and equipment are cleaned immediately after use in line with farm procedures 3.2 Routine check-up and maintenance are performed 3.3 Tools and equipment are stored in designated areas in line with farm procedures

RANGE OF VARIABLES

VARIABLE	RANGE
1. Farm equipment	1.1 Engine 1.2 Pumps 1.3 Generators 1.4 Sprayers
2. Farm tools	2.1 Cutters 2.2 Weighing scales 2.3 Hand tools 2.4 Measuring tools
3. Pre-operation check-up	3.1 Tires 3.2 Brake fluid 3.3 Fuel 3.4 Water 3.5 Oil 3.6 Lubricants 3.7 Battery

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Correctly identified appropriate farm tools and equipment</p> <p>1.2 Operated farm equipments according to manual specification</p> <p>1.3 Performed preventive maintenance</p>
<p>2. Underpinning Knowledge and Attitudes</p>	<p>2.1 Safety Practices</p> <p>2.1.1 Ideal good work habits to demonstrate to workers easy and safety standards during operation of farm equipment</p> <p>2.2 Codes and Regulations</p> <p>2.2.1 Environmental Compliance Certificate (ECC)</p> <p>2.2.2 Effective work supervision in the operations of farm equipment</p> <p>2.3 Tools & Equipment: Uses and Specification</p> <p>2.3.1 Knowledge in calibrating and use of equipment</p> <p>2.3.2 Safety keeping of equipment every after use</p> <p>2.4 Maintenance</p> <p>2.4.1 Regular upkeep of equipment</p> <p>2.4.2 Preventive maintenance skills</p> <p>2.5 Values</p> <p>2.5.1 Positive outlook towards work</p> <p>2.5.2 Possesses pre-emptive/anticipatory skills</p>
<p>3. Underpinning Skills</p>	<p>3.1 Ability to recognized defective farm equipment</p> <p>3.2 Perform proper management practices of safety measures</p>
<p>4. Method of Assessment</p>	<p>Competency in this unit must be assessed through:</p> <p>4.1 Direct observation</p> <p>4.2 Practical demonstration</p> <p>4.3 Third Party Report</p>
<p>5. Resource Implications</p>	<p>The following resources MUST be provided:</p> <p>5.1 Service/operational manual of farm tools and equipment</p> <p>5.2 Tools and equipment</p> <p>5.3 Farm implements</p>
<p>6. Context of Assessment</p>	<p>6.1 Assessment may occur in the workplace or in a simulated workplace or as part of a team under limited supervision</p>

UNIT TITLE: PERFORM ESTIMATION AND CALCULATION

UNIT CODE: AGR321203

UNIT DESCRIPTOR: This unit covers the knowledge, skills and attitudes required to perform basic workplace calculations.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Perform estimation	1.1 Job requirements are identified from written or oral communications 1.2 Quantities of materials and resources required to complete a work task are estimated 1.3 The time needed to complete a work activity is estimated 1.4 Accurate estimate for work completion are made 1.5 Estimate of materials and resources are reported to appropriate person
2. Perform basic workplace calculation	2.1 Calculations to be made are identified according to job requirements 2.2 Correct method of calculation identified 2.3 System and units of measurement to be followed are ascertained 2.4 Calculation needed to complete work tasks are performed using the four basic process of addition, division, multiplication and subtraction 2.5 Calculate whole fraction, percentage and mixed when are used to complete the instructions 2.6 Number computed in self checked and completed for alignment

RANGE OF VARIABLES

VARIABLE	RANGE
1. Calculations	1.1 Quantity of feeds 1.2 Amount of medicines
2. Method of calculation	2.1 Addition 2.2 Subtraction 2.3 Multiplication 2.4 Division 2.5 Ratio and proportion
3. System of measurement	3.1 English 3.2 Metric
4. Units of measurement	4.1 Area 4.2 Volume 4.3 Weight

EVIDENCE GUIDE

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Performed estimation 1.2 Performed basic workplace calculation 1.3 Applied corrective measures as maybe necessary
2. Underpinning Knowledge and Attitudes	<ul style="list-style-type: none"> 2.1 Mathematics <ul style="list-style-type: none"> 2.1.1 Basic mathematical operations 2.1.2 Percentage and ratios 2.1.3 Unit Conversion 2.1.4 Basic accounting principles and procedures <ul style="list-style-type: none"> 2.1.4.1 Production cost 2.1.4.2 Sales 2.1.4.3 Accounts receivables/payables 2.2 Systems, Processes and Operations <ul style="list-style-type: none"> 2.2.1 Knowledge in different management practices and operational procedures 2.3 Values <ul style="list-style-type: none"> 2.3.1 Safety consciousness 2.3.2 Time consciousness and management 2.3.3 Cost consciousness 2.3.4 Precision
3. Underpinning Skills	<ul style="list-style-type: none"> 3.1 Ability to perform basic calculation 3.2 Communicate effectively
4. Method of Assessment	<p>Competency in this unit must be assessed through:</p> <ul style="list-style-type: none"> 4.1 Practical demonstration 4.2 Written examination
5. Resource Implications	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 5.1 Relevant tools and equipment for basic calculation 5.2 Recommended data
6. Context of Assessment	<ul style="list-style-type: none"> 6.1 Assessment may occur in the workplace or in a simulated workplace or as part of a team under limited supervision

CORE COMPETENCIES

UNIT OF COMPETENCY : **RESTRAIN AND HANDLE LIVESTOCK**

UNIT CODE : AGR321301

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to restrain and handle livestock according to industry standards and animal welfare. It includes selection of animals and evaluation of animal conditions, and selection and application of appropriate handling and restraining technique.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Select animal and observe its condition	1.1 The candidate <i>livestock</i> is identified and selected according to instructions and specifications from supervisor or veterinarian 1.2 The <i>stage of production</i> of identified animal is determined based on observation and records 1.3 The prevailing condition is observed and reported in terms of <i>animal grouping</i>
2. Apply appropriate handling and restraining technique	2.1 Animal is handled following standard operating procedures to minimize animal stress 2.2 <i>Restraining technique</i> is selected based on the degree of restraint needed 2.3 <i>Tools and equipment</i> and <i>supplies and materials</i> are prepared according to restraining technique to be applied 2.4 The chosen technique is executed in accordance with animal welfare act

RANGE OF VARIABLES

VARIABLE	RANGE
1. Livestock	1.1 Cattle 1.2 Carabao 1.3 Swine
2. Stage of production	2.1 Breeding animals/Dry 2.2 Gestating/Pregnant 2.3 Lactating 2.4 Weanling/Weaner/Baby pig stage/Calf 2.5 Growers/Finishers
3. Animal grouping	3.1 Individual penning 3.2 Communal penning 3.3 Rauge penning
4. Tools and equipment	4.1 Driving board 4.2 Snoozer 4.3 Rope 4.4 Emasculator 4.5 Castration table/Chute 4.6 Sacks/Hoods 4.7 Syringes (10ml, 20ml)
5. Supplies and materials	5.1 Medical supplies 5.2 Syringe (disposable) 5.3 Needles (G21, G18, G16)
6. Restraining technique	6.1 Chute restraint 6.2 Snooze restraint 6.3 Tranquilizer 6.4 Use of driving board 6.5 Electric probe 6.6 "Hood" 6.7 Cart/truck/push cart

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Identified stage of production of the animal 1.2 Identified different restraining techniques for specific restraining purposes 1.3 Selected suitable handling and restraining technique 1.4 Handled animal with minimal stress 1.5 Prevented harm and undue risks to restrainer and restrained animals 1.6 Communicated and worked effectively with teams
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Communication <ul style="list-style-type: none"> 2.1.1 Ability to follow instructions from the veterinarian 2.2 Safety Practices <ul style="list-style-type: none"> 2.2.1 Prevention of undue risks to restrainer and restrained animal 2.2.2 Implementation of procedures relative to proper handling of animals, use and disposal of biologics and other veterinary drugs and supplies based on manufacturers specifications or veterinarian's recommendations 2.3 Tools and Equipment: Uses and Specification <ul style="list-style-type: none"> 2.3.1 Driving board 2.3.2 Snoozer 2.3.3 Rope 2.3.4 Castration table 2.3.5 Sacks/hoods 2.3.6 Syringe (10ml and 20 ml) 2.4 Maintenance <ul style="list-style-type: none"> 2.4.1 Regular check-up and repair of tools and equipment 2.5 Systems, Processes and Operations <ul style="list-style-type: none"> 2.5.1 Follow assigned instructions from veterinarian 2.5.2 Compliance to SOP of acceptable restraining practices 2.5.3 Knowledge of the different restraining techniques 2.6 Codes and Regulations <ul style="list-style-type: none"> 2.6.1 Compliance with animal health programs and administrative orders (AOs) of the BAI and NMIS 2.6.2 Animal Welfare Act

	<p>2.7 Values</p> <p>2.7.1 Safety consciousness of self and target animal</p> <p>2.7.2 Personal integrity and perseverance in performing routine job</p> <p>2.7.3 Appropriate use of restraining technique in accordance to the stages of production</p> <p>2.7.4 Consideration to non-target animals</p>
3. Underpinning Skills	<p>3.1 Work safety</p> <p>3.2 Skills in using tools and equipment</p> <p>3.3 Calculations</p> <p>3.4 Communicate ideas and information</p>
4. Method of Assessment	<p>Competency in this unit must be assessed through:</p> <p>4.1 Observation/Demonstration</p> <p>4.2 Third party report</p> <p>4.3 Portfolio</p>
5. Resource Implications	<p>The following resources MUST be provided:</p> <p>5.1 Sample animals</p> <p>5.2 Supplies and materials</p> <p>5.3 Tools and equipment appropriate to restrain and handle animals</p>
6. Context of Assessment	<p>6.1 Competency may be assessed individually in the workplace or in a simulated workplace individually or as a part of a team under limited supervision</p>

	<p>3.4 Sick and unfit stocks are culled or isolated in accordance to animal welfare act or standard operating procedure</p> <p>3.5 Dead stocks and by-products are disposed using proper disposal method</p> <p>3.6 Communication with supervising veterinarian are done regularly or as the need arise based on observation</p>
4. Maintain records	<p>4.1 Appropriate records are kept, collated and updated regularly in accordance with organizational policy</p> <p>4.2 Reporting to veterinarian or supervisor are carried out properly based on records</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Immediate threats	<p>1.1 Natural calamities</p> <p>1.2 Physical threat</p> <p>1.3 Unforeseen events (prevailing diseases, outbreaks)</p>
2. Bio-security threats	<p>2.1 Animals other than stocks being taken cared of</p> <p>2.2 Diseases</p> <p>2.2.1 Bacterial</p> <p>2.2.2 Viral diseases</p> <p>2.2.3 Parasitic diseases</p> <p>2.2.4 Parasitism</p> <p>2.3 Finished products/By-products of animal production</p> <p>2.4 Traffic flow of potential carriers</p> <p>2.4.1 People</p> <p>2.4.2 Stocks</p> <p>2.4.3 Equipment</p> <p>2.4.4 Vehicles</p> <p>2.5 Birds, pests and rodents</p>
3. Supplies and materials	<p>3.1 Syringes</p> <p>3.2 Needles</p> <p>3.3 Drugs and other medical supplies</p>
4. Tools and equipment	<p>4.1 Boots</p> <p>4.2 Rust remover</p> <p>4.3 Power sprayer</p> <p>4.4 Portable sprayer</p> <p>4.5 Torch</p>

5. Disinfectants	5.1 Chemical disinfectants 5.1.1 Phenols 5.1.2 Iodophore 5.1.3 Aldehydes 5.1.4 Organic salts 5.1.5 Quarternary products 5.1.6 Combined disinfectants 5.2 Physical disinfectants 5.2.1 Torch 5.2.2 Disposable suits 5.2.3 Boots 5.2.4 Paints 5.2.5 Rust remover 5.3 Lime for animal disposal
6. Stocks	6.1 Replacement breeder 6.2 Outsourced piglets/heifers 6.3 Outsourced fatteners/bulls/cows
7. Vaccination program	7.1 Market pig program 7.2 Breeder stocks program
8. Health program	8.1 Medication program 8.2 Deworming program 8.3 Deticking
9. Sick and unfit stocks	9.1 Listlessness 9.2 Increase body temperature 9.3 Loss appetite 9.4 Solitary separation from the group 9.5 Mucosal discharge on the eyes and snout 9.6 Swollen body parts 9.7 Appearance of vesicles
10. Disposal method	10.1 Bury animals 10.2 Use mortality pit
11. Appropriate records (Checklist)	11.1 Livestock population 11.2 Vaccination 11.3 Medication 11.4 Standard routine procedure

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Identified bio-security threats 1.2 Properly prepared and applied disinfectants 1.3 Implemented hygiene and sanitation practices for himself and for the farm 1.4 Implemented vaccination program 1.5 Implemented proper health program 1.6 Identified sick and unfit animals 1.7 Performed quarantined and acclimatization procedure 1.8 Disposed dead stocks or by-products properly 1.9 Maintained records appropriately 1.10 Communicated and worked effectively with others
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Communication <ul style="list-style-type: none"> 2.1.1 Accomplishing the check list 2.2 Safety Practices <ul style="list-style-type: none"> 2.2.1 Knowledge in handling disinfectants and other veterinary supplies 2.2.2 Knowledge of proper waste handling and management 2.3 Mathematics and Mensuration <ul style="list-style-type: none"> 2.3.1 Proper calculation of inclusion rates of disinfectants and chemicals 2.4 Codes and Regulations <ul style="list-style-type: none"> 2.4.1 Appropriate legal and supervising regulatory body pertinent to bio-security program such as BAI, PAHC, and DENR 2.5 Systems, Processes and Operations <ul style="list-style-type: none"> 2.5.1 Selection of replacement or new stocks 2.5.2 Implementation of appropriate animal health program 2.6 Materials: Uses and Specifications <ul style="list-style-type: none"> 2.6.1 Drugs and medical supplies 2.6.2 Office supplies and materials – for regular inventory and monitoring of animal health program <ul style="list-style-type: none"> 2.6.2.1. Tools and Equipment: Uses and Specifications <ul style="list-style-type: none"> A Rust remover B Power sprayer C Torch 2.6.2.2. Values <ul style="list-style-type: none"> A Honesty in reporting B Confidence in selecting healthy replacement or new stocks C Personal integrity and perseverance in performing routine bio-security measures D Ability to work well with others harmoniously

3. Underpinning Skills	3.1 Work safety 3.2 Calculations 3.3 Communicate effectively
4. Method of Assessment	Competency in this unit must be assessed through: 4.1 Observation/Demonstration 4.2 Third party report 4.3 Portfolio
5. Resource Implication	The following resources MUST be provided: 5.1 Farm location with required facilities 5.2 Supplies and materials applied for bio-security measures
6. Context of Assessment	6.1 Competency may be assessed individually in the actual workplace or through accredited farms/institution

UNIT OF COMPETENCY : ADMINISTER DRUGS AND BIOLOGICS

UNIT CODE : AGR321303

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to administer drugs and biologics in livestock farms. It includes preparation of supplies, materials, tools and equipment, preparation of animal, application of drugs and biologics, and monitoring and recording animal response to drugs and biologics. It requires more supervision from veterinarian.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Prepare appropriate supplies, materials, tools and equipment	1.1 Availability of necessary supplies and materials are checked and prepared according to standard operating procedure 1.2 Supplies and materials are transported to the pig house/pen using approved transport tools and equipment 1.3 Availability of appropriate tools and equipment are checked and prepared according to standard operating procedure 1.4 Tools and equipment are transported to the animal house/pen using approved transport tools and equipment
2. Prepare animals	2.1 Animals are prepared according to standard organizational procedures or based on animal health status 2.2 Animals are restrained/handled using appropriate restraining technique in accordance with the relevant provisions of the Animal Welfare Act
3. Apply drugs and biologics	3.1 Drugs and biologics are checked based on the manufacturer's or veterinarian's recommendations 3.2 Necessary precautions when administering drugs and biologics are checked according to manufacturer's or veterinarian's recommendations 3.3 The body weight of the animal is estimated (if the quantity to drug to be administered is based on weight) 3.4 The route of administration is determined based on manufacturer's recommendation 3.5 The drugs and biologics are administered to animals according to standard operating procedures 3.6 Used supplies and materials are disposed as need following appropriate disposal method 3.7 Reusable supplies and materials are cleaned, disinfected and stored following standard operating procedures

4. Monitor and record response to drugs and biologics	<p>4.1 The name of drugs/biologics and dosage administered to the pigs are recorded on the animals' respective record card</p> <p>4.2 Reactions/responses of the animal to the medication are checked at least twice a day. Observations are recorded</p>
5. Record Data	<p>5.1 Biologics and drug inventories are updated</p> <p>5.2 Medication and vaccination programs are monitored</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Supplies	<p>1.1 Drugs</p> <p>1.1.1 Nutritional supplements</p> <p>1.1.1.1 Vitamins and mineral</p> <p>1.1.1.2 Colostrums supplements</p> <p>1.1.2 Hormones</p> <p>1.1.3 Antibiotics</p> <p>1.1.4 Anthelmintics</p> <p>1.1.5 Electrolytes</p> <p>1.1.6 Growth promoters</p> <p>1.1.7 Probiotics</p> <p>1.1.8 Vial of epinephrine/adrenaline</p> <p>1.2 Biologics</p> <p>1.2.1 Vaccines</p> <p>1.2.2 Sera</p>
2. Materials (consumables)	<p>2.1 Needles (hypodermic or disposable)</p> <p>2.2 Syringe (disposable)</p> <p>2.3 Disinfectant (iodine)</p> <p>2.4 Cotton balls</p> <p>2.5 Writing implements (pen or chalk)</p> <p>2.6 Animal marker</p> <p>2.7 Refrigerant/ice</p>
3. Tools and equipment	<p>3.1 Pig (wire) restrainer</p> <p>3.2 Driving board</p> <p>3.3 Syringe (fiberglass, metal, automatic, self-refilling)</p> <p>3.4 Cool box</p> <p>3.5 Allis tissue forceps</p> <p>3.6 Medication tray or cart</p>

4. Animal health status	4.1 For routine application of vaccines and supplements 4.2 For treatment of sick or recumbent animals 4.3 For routine or emergency surgical procedures
5. Restraining techniques	5.1 Chute restraint 5.2 Snooze restraint 5.3 Tranquilizer 5.4 Use of driving board 5.5 Electric probe 5.6 "Hood" 5.7 Cart/truck/push cart
6. Precautions when administering drugs and biologics	6.1 Contraindication 6.2 Special instructions 6.3 Side-effects 6.4 Effects on the animal health technician (e.g. some drugs like etiproston should not be administered to pigs by a pregnant person; some drugs like amitraz need to be administered to pigs with protective clothing (gloves, mask))
7. Veterinarian's recommendation	7.1 Generic name of drugs/biologics 7.2 Brand name of drugs/biologics 7.3 Dosage 7.4 Route of administration
8. Route of administration	8.1 Intramuscular 8.2 Subcutaneous 8.3 Intranasal 8.4 Intradermal 8.5 Intraperitoneal 8.6 Oral 8.7 Topical
9. Disposal method	9.1 Incineration 9.2 Garbage pit 9.3 Bury
10. Reactions/ Responses	10.1 Recovering 10.2 Adverse reaction 10.2.1 Anaphylactic shock 10.2.2 Allergies 10.2.3 Mild clinical conditions (shivering, tremors, lethargy) 10.2.4 Pyrexia/Fever

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Selected appropriate supplies, materials, tools and equipment in preparation for administration of drugs and biologics 1.2 Prepared and properly restrained pigs for administration of drugs and biologics 1.3 Administered drugs and biologics with standard procedures 1.4 Monitored response to administration of drugs and biologics 1.5 Communicated and worked effectively with others
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Communication <ul style="list-style-type: none"> 2.1.1 Preparation of report 2.2 Safety Practices <ul style="list-style-type: none"> 2.1.2 Proper handling, use and disposal of drugs and biologics 2.3 Mathematics and Mensuration <ul style="list-style-type: none"> 2.3.1 Weight estimation 2.4 Codes and Regulations <ul style="list-style-type: none"> 2.4.1 Compliance to animal health program of the BAI, PAHC, NMIS, and DENR 2.4.2 Compliance to the Animal Welfare Act 2.5 Systems, Processes and Operations <ul style="list-style-type: none"> 2.5.1 General care and herd health management of livestock 2.5.2 Basic on-farm hygiene procedures 2.6 Tools and Equipment: Uses and Specifications <ul style="list-style-type: none"> 2.6.1 Syringe (fiberglass, metal, automatic, self-refilling) 2.6.2 Allis tissue forceps 2.7 Maintenance <ul style="list-style-type: none"> 2.7.1 Regular check-up and repair and replacement (as needed) of tools and equipments related to administering drugs and biologics 2.8 Materials: Uses and Specifications <ul style="list-style-type: none"> 2.8.1 Medical supplies and materials 2.8.2 Office equipment and supplies for regular monitoring of animal health performance 2.9 Values <ul style="list-style-type: none"> 2.9.1 Tender loving care in handling animals 2.9.2 Safety consciousness on handling drugs and biologics and other biological 2.9.3 Work dedication 2.9.4 Following directions obediently 2.9.5 Perseverance and industriousness on care and management of the general herd

3 Underpinning Skills	3.1 Work safety 3.2 Skills in using tools and equipment 3.3 Calculations 3.4 Communicating ideas and information
4 Method of Assessment	Competency in this unit must be assessed through: 4.1 Observation/Demonstration 4.2 Third party report 4.3 Portfolio
5. Resource Implications	The following resources MUST be provided: 5.1 Farm location 5.2 Supplies, materials, tools and equipment needed in administering drugs and biologics
6. Context for Assessment	6.1 Competency maybe assessed individually in the workplace or in a simulated workplace under limited supervision

UNIT OF COMPETENCY : **HANDLE AND STORE DRUGS AND BIOLOGICS**

UNIT CODE : AGR321304

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to handle and store drugs and biologics. It includes preparation and transport of drugs and biologics using appropriate container, disposal of used bottles, storage of unused drugs and biologics and keeping of records.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Prepare and transport drugs and biologics	1.1 Drugs and biologics are checked for expiration dates, and the contents for any signs of damage 1.2 Drugs and biologics are transported or carried to and from the farm building using specified container/equipment and materials
2. Dispose used bottles and biologics	2.1 Used bottles are disposed of properly using approved disposal methods or standard operating procedures 2.2 Expired and damaged drugs and biologics are reported and disposed following standard operating procedures
3. Store unused drugs and biologics	3.1 Unused drugs and biologics are kept and stored in their proper places based on standard operating practice 3.2 Unused drugs and biologics are kept and stored following the specific storage temperature requirements as stated in the label 3.3 Portions of unused drugs and biologics are labeled and sealed based on standard operating procedures 3.4 Unused drugs and biologics are properly stored using first – in – first – out (FIFO) system
4. Maintain records and provide feedback	4.1 Records are kept and updated according to organization standard 4.2. Reporting to supervisor or veterinarian is carried out based on records

RANGE OF VARIABLES

VARIABLE	SCOPE
1. Damage	1.1 Discoloration 1.2 Cracks in the bottle, distorted or missing label 1.3 Molds
2. Drugs and biologics	2.1 Antibiotics (parenteral, oral) 2.2 Vitamins (parenteral, oral) 2.3 Hormones 2.4 Vaccines 2.5 Probiotics 2.6 Enzymes
3. Container/ Equipment	3.1 Tool box 3.2 Styropor 3.3 Covered box
4. Materials	4.1 Refrigerant 4.2 Ice packs
5. Disposal method	5.1 Disposing thru accredited hauling institution 5.2 Burning 5.3 Recycling
6. Proper places	6.1 Medicine cabinet 6.2 Refrigerators 6.3 Waste can for empty bottles
7. Storage temperature	7.1 Room temperature (antibiotics and other drugs) 7.2 2°C – 8°C (biologics)
8. Records	8.1 Inventory and consumption records 8.2 Vaccination records (checklist) 8.3 Drug disposal records (checklist)

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Prepared drugs and biologics for transport to and from the farm building using the appropriate procedures and containers 1.2 Disposed used drug bottles in accordance with established procedures and methods 1.3 Reported and disposed expired and damaged drugs and biologics 1.4 Identified and monitored the proper storage temperatures for various drugs and biologics 1.5 Properly stored, labeled and sealed unused drugs and biologics 1.6 Maintained report and provided feedback 1.7 Communicated and worked effectively with others
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Communication <ul style="list-style-type: none"> 2.1.1 Preparation of storage labels 2.1.2 Maintain records and provide feedback 2.2 Safety Practices <ul style="list-style-type: none"> 2.2.1 Knowledge in handling biologics and other veterinary drugs and supplies 2.2.2 Knowledge of proper handling and management of disposable supplies and materials 2.2.3 Occupational health and safety practices 2.3 Codes and Regulations <ul style="list-style-type: none"> 2.3.1 Appropriate legal and supervising regulatory body pertinent to handling drugs and biologics such as BAI and DENR 2.4 Systems, Processes and Operations <ul style="list-style-type: none"> 2.4.1 Accomplishing stocking procedures in accordance to standard operating practices 2.4.2 Standard operating procedures in the disposal of used supplies and materials 2.4.3 Monitoring of required storage temperatures and other environmental conditions 2.5 Materials: Uses and Specifications <ul style="list-style-type: none"> 2.5.1 Selection of proper transport containers and equipment 2.5.2 Classification of drugs and biologics 2.6 Values <ul style="list-style-type: none"> 2.6.1 Safety consciousness in handling drugs and biologics 2.6.2 Honesty in reporting “spoiled” vaccines 2.6.3 Conscious effort to lower production costs thru proper handling and storage of drugs and biologics

	<p>2.6.4 Personal integrity and perseverance in performing routine job</p> <p>2.6.5 Empathy or “Malasakit”</p>
3. Underpinning Skills	<p>3.1 Work safety</p> <p>3.2 Communicate effectively</p>
4. Method of Assessment	<p>Competency in this unit must be assessed through:</p> <p>4.1 Observation/Demonstration</p> <p>4.2 Third party report</p> <p>4.3 Portfolio</p>
5. Resource Implications	<p>The following resources MUST be provided:</p> <p>5.1 Farm location with required facilities</p> <p>5.2 Tools and materials needed for proper handling and storage of drugs and biologics</p>
6. Context of Assessment	<p>6.1 Competency shall be assessed individually in the workplace or in a simulated environment</p>

UNIT OF COMPETENCY : COLLECT AND HANDLE SPECIMEN

UNIT CODE : AGR321305

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to collect and handle specimen. It includes preparation of supplies and materials, selection and execution of appropriate restraining technique, collection and transport of specimen under the supervision of veterinarian.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Prepare supplies, materials, tools and equipment	1.1 Supplies and materials needed for specimen collection and transport are prepared 1.2 Materials to be used are sterilized and cleaned according to standard operating procedure 1.3 Tools and equipment needed to restrain animals are prepared based on the restraining technique to be used
2. Prepare animal	2.1 The appropriate restraining technique is selected based on the degree of restraint needed 2.2 The chosen technique is executed in accordance to the conditions of the animal welfare act
3. Collect and transport specimen	3.1 The specimen is collected under the supervision of veterinarian 3.2 Appropriate specimen volume is collected based on standard operating practice 3.3 Collected specimen is placed in appropriate container with cap or proper closure and properly labeled according to specimen collected 3.4 Required temperature of collected sample is maintained in accordance to standard operating procedure 3.5 Specimen is transported to the diagnostic laboratory following standard operating practice

RANGE OF VARIABLES

VARIABLE	SCOPE
1. Supplies and materials	1.1 Container 1.2 Cap 1.3 Refrigerant or ice 1.4 Mineral Oil 1.5 Formalined solution 1.6 Vial, Test tube or glass slide 1.7 Resealable plastic bag 1.8 Vacutainer
2. Tools and equipment	2.1 Syringe (5cc glass) 2.2 Needle 2.3 Refrigerator 2.4 Scalpel with blade
3. Restraining technique	3.1 Chute restraint 3.2 Snooze restraint 3.3 Tranquilizer 3.4 Use of driving board 3.5 Electric probe 3.6 "Hood" 3.7 Cart/truck/push cart
4. Specimen	4.1 Blood 4.2 Organ specimen 4.3 Fecal sample 4.4. Skin scrapings 4.4 Feed for Analysis and Testing
5. Volume/Quantity	4.1 Blood sample: minimum of 5cc 4.2 Organ sample: 5 – 10 grams 4.3 Fecal sample: 5 –10 grams 4.4 Feed: 1 kilograms 4.5 Tissue: minimal
6. Container	5.1 Test tube 5.2 Vial 5.3 Plastic 5.4 Styropor 5.5 Covered box
7. Cap	6.1 Cotton 6.2 Cork 6.3 Rubber stopper
8. Temperature	7.1 Room temperature for blood and fecal sample 7.2 3 ⁰ C – 12 ⁰ C for organ specimen

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Prepared supplies and materials use for the collection and handling of specimen and restraining of animal 1.2 Collected specimen according to standard operating procedure 1.3 Handled and labeled specimen using the appropriate container for transport 1.4 Identified and monitored the required temperature in handling and transporting of specimen 1.5 Properly stored reusable supplies and materials for future specimen collection 1.6 Communicated and worked effectively with others
<p>2. Underpinning Knowledge and Attitudes</p>	<ul style="list-style-type: none"> 2.1 Communication <ul style="list-style-type: none"> 2.1.1 Preparation of animal history report 2.2 Safety Practices <ul style="list-style-type: none"> 2.2.1 Knowledge in collection of specimen 2.2.2 Knowledge in proper handling and transport of specimen 2.3 Systems, Processes and Operations <ul style="list-style-type: none"> 2.3.1 Restraining of animals for specimen collection 2.3.2 Proper procedure in collecting specimen 2.3.3 Standard operating procedures in the disposal of used supplies and materials 2.3.4 Monitoring of required storage temperature 2.4 Tools and Equipment <ul style="list-style-type: none"> 2.4.1 Syringe (5cc glass) 2.4.4 Scalpel with blade 2.5 Quantity of specimen for collection <ul style="list-style-type: none"> 2.5.1 Organ specimen – 5 to 10 grams 2.5.2 Fecal sample – 5 to 10 grams 2.5.3 Blood sample – 55 cc 2.5.4 Feed sample – 5 to 10 grams

	<p>2.6 Values</p> <p>2.6.1 Safety consciousness in collecting and handling specimen</p> <p>2.6.2 Honesty in reporting animal history where samples were taken</p> <p>2.6.3 Diligence at work</p> <p>2.6.4 Conscious effort to handle specimen correctly to avoid contamination or spoilage</p>
3. Method of Assessment	<p>Competency in this Unit must be assessed through:</p> <p>3.1 Observation/Demonstration</p> <p>3.2 Third party report</p> <p>3.3 Portfolio</p>
4. Resource Implications	<p>The following resourced MUST be provided</p> <p>4.1 Farm location with required facilities</p> <p>4.2 Tools and materials needed for specimen collection, transport and handling</p>
5. Context of Assessment	<p>5.1 Competency shall be assessed individually in the workplace or in a simulated environment</p>

SECTION 3. TRAINING STANDARDS

These guidelines are set to provide the Technical and Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for **ANIMAL HEALTH CARE AND MANAGEMENT NC III**.

3.1 CURRICULUM DESIGN

Course Title: **ANIMAL HEALTH CARE AND MANAGEMENT NC III**

Nominal Training Duration: **18 Hours (Basic)**
 14 Hours (Common)
 176 Hours (Core)
 208 Total

Course Description:

The **ANIMAL HEALTH CARE AND MANAGEMENT NC III** Qualification consists of competencies that a person must achieve in providing LIVESTOCK HEALTH CARE in both backyard and commercial livestock farms under the supervision of a veterinarian. It covers the basic, common and core competencies.

BASIC COMPETENCIES

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Lead workplace communication	1.1 Communicate information about workplace processes 1.2 Lead workplace discussions 1.3 Identify and communicate issues arising in the workplace	<ul style="list-style-type: none"> • Group discussion • Role play • Brainstorming 	<ul style="list-style-type: none"> • Observation • Interviews
2. Lead small teams	2.1 Provide team leadership 2.2 Assign responsibilities among members 2.3 Set performance expectation for team members 2.4 Supervise team performance	<ul style="list-style-type: none"> • Lecture • Demonstration • Self-paced (modular) 	<ul style="list-style-type: none"> • Demonstration • Case studies

3. Develop and practice negotiation skills	3.1 Plan negotiations 3.2 Participate in negotiations 3.3 Document areas for agreement	<ul style="list-style-type: none"> • Direct observation • Simulation/ role playing • Case studies 	<ul style="list-style-type: none"> • Written test • Practical/ performance test
4. Solve problems related to work activities	4.1 Explain the analytical techniques 4.2 Identify the problem 4.3 Determine the possible cause/s of the problem	<ul style="list-style-type: none"> • Direct observation • Simulation/ Role playing • Case studies 	<ul style="list-style-type: none"> • Written test • Practical/performance test
5. Use mathematical concepts and techniques	5.1 Identify mathematical tools and techniques to solve problem 5.2 Apply mathematical procedures/solution 5.3 Analyze results	<ul style="list-style-type: none"> • Direct observation • Simulation/ role playing • Case studies 	<ul style="list-style-type: none"> • Written test • Practical/ performance test
6. Use relevant technologies	6.1 Identify appropriate technology 6.2 Apply relevant technology 6.3 Maintain/enhance relevant technology	<ul style="list-style-type: none"> • Direct observation • Simulation/ role playing • Case Studies 	<ul style="list-style-type: none"> • Written test • Practical/ performance test

COMMON COMPETENCIES

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Apply safety measures in farm operations	1.1 Determine areas of concern for safety measures 1.2 Apply appropriate safety measures 1.3 Safekeep/maintain/dispose tools, materials and outfit	<ul style="list-style-type: none"> • Self-paced/modular • Lecture/ Discussion • Interaction • Practical Demonstration • Visit/tour 	<ul style="list-style-type: none"> • Oral/Written Interviews • Direct Observation • Practical Demonstration
2. Use farm tools and equipment	2.1 Prepare and use farm tools 2.2 Prepare and operate farm equipment 2.3 Perform preventive maintenance procedures/practices	<ul style="list-style-type: none"> • Self-paced/modular • Lecture/ Discussion • Interaction • Practical Demonstration • Visit/tour 	<ul style="list-style-type: none"> • Oral/Written Interviews • Direct Observation • Practical Demonstration

3. Perform estimation and basic calculation	3.1 Perform estimation 3.2 Perform basic workplace calculation	<ul style="list-style-type: none"> • Self-paced/modular • Lecture/Discussion • Interaction • Practical Exercise 	<ul style="list-style-type: none"> • Oral/Written examination • Practical exercise
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CORE COMPETENCIES

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Restrain and Handle Animal	1.1 Identify and select animal 1.2 Apply appropriate handling and retraining technique	<ul style="list-style-type: none"> • Demonstration • Discussion 	<ul style="list-style-type: none"> • Demonstration of practical skills • Direct observation • Interview
2. Apply Bio-Security Measures	2.1 Identify bio-security threats and hazards 2.2 Apply disease prevention practices 2.3 Apply preventive disease transmission practices	<ul style="list-style-type: none"> • Demonstration • Discussion 	<ul style="list-style-type: none"> • Written examination • Demonstration of practical skills • Direct observation • Interview
3. Administer Drugs and Biologics	3.1 Prepare supplies, materials, tools and equipment 3.2 Prepare animals 3.3 Apply drugs and biologics 3.4 Monitor and record response to drugs and biologics	<ul style="list-style-type: none"> • Demonstration • Discussion 	<ul style="list-style-type: none"> • Demonstration of practical skills • Direct observation • Interview
4. Handle and Store Drugs and Biologics	4.1 Prepare drugs and biologics 4.2 Handle and transport drugs and biologics 4.3 Store unused drugs and biologics 4.4. Dispose used bottles, expired and damaged biologics	<ul style="list-style-type: none"> • Demonstration • Discussion 	<ul style="list-style-type: none"> • Written examination • Direct observation • Interview

<p>5. Collect and Handle Specimen</p>	<p>5.1 Prepare supplies, materials, tools and equipment for collection and transport of specimen</p> <p>5.2 Prepare animal</p> <p>5.3 Collect specimen</p> <p>5.4 Handle and transport specimen</p>	<ul style="list-style-type: none"> • Demonstration • Discussion 	<ul style="list-style-type: none"> • Demonstration of practical skills • Direct observation • Interview
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3.2 TRAINING DELIVERY

The delivery of training should adhere to the design of the curriculum. Delivery should be guided by the 10 basic principles of competency-based TVET.

- The training is based on curriculum developed from the competency standards;
- Learning is modular in its structure;
- Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies;
- Training is based on work that must be performed;
- Training materials are directly related to the competency standards and the curriculum modules;
- Assessment is based in the collection of evidence of the performance of work to the industry required standard;
- Training program allows for recognition of prior learning (RPL) or current competencies;
- Training allows for multiple entry and exit; and
- Training programs are registered with UTPRAS.

The competency-based TVET system recognizes various types of delivery modes, both on and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities may be adopted when designing training programs:

- The dualized mode of training delivery is preferred and recommended. Thus programs would contain both in-school and in-industry training or fieldwork components. Details can be referred to the Dual Training System (DTS) Implementing Rules and Regulations.
- Modular/self-paced learning is a competency-based training modality wherein the trainee is allowed to progress at his own pace. The trainer facilitates the training delivery
- Peer teaching/mentoring is a training modality wherein fast learners are given the opportunity to assist the slow learners.
- Supervised industry training or on-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies prescribed in the training regulations.
- Distance learning is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may employ correspondence study, or audio, video or computer technologies.
- Project-Based Instruction is an authentic instructional model or strategy in which students plan, implement and evaluate projects that have real world applications.

3.3 TRAINEE ENTRY REQUIREMENTS

Trainees or students wishing to enroll in this course should possess the following requirements:

- Ability to communicate, both oral and written;
- Have attended training on Animal Production NC II or have had equivalent experience or have been certified in the Units of Competency Raise Swine (AGR621303) and Raise Large Ruminants (AGR621304)
- Physically fit and mentally healthy as certified by a Public Health Officer

4.2 LIST OF TOOLS, EQUIPMENT AND MATERIALS

ANIMAL HEALTH CARE AND MANAGEMENT NC III

Recommended list of tools, equipment and materials for the training of 25 trainees for Animal Health Care and Management NC III

QTY	TOOLS	QTY	EQUIPMENT	QTY	MATERIALS
5 pcs	Driving board	5 units	Castration table	5 pcs	Sacks/Hood
5 pcs	Snoozer	5 sets	Medication tray	25 pcs	Vial
5 pcs	Rope	5 units	Cart	25 pcs	Test tube
5 pcs	Pig wire	25 pairs	Boots	25 sets	Needles
25 pcs	Allis tissue forceps	25 pairs	Disposable suit	25 sets	Syringe (10 ml. 20ml)
25 pcs	Scalpel with blade	1 unit	Sprayer (portable, power sprayer)	200 ml	Mineral oil (bottle)
1 pc	Torch	5 pcs	Container equipment	25 pcs	Cap (cotton, cork, rubber stopper)
		5 pcs	Cool box	25 pcs	Refrigerant
		5 pcs	Styropor box	25 pcs	Resealable plastic bag
		1 unit	Refrigerator	25 pcs	Ice packs
		5 pcs	Covered box	25 pcs	Glass slide
				25 pcs	Vacutainer
				500 ml	Paints
				500 ml	Rust remover
				1 liter	Chemical disinfectants
				5 bottles	Drugs, biologics and

3.5 TRAINING FACILITIES

ANIMAL HEALTH CARE AND MANAGEMENT NC III

Based on a class size of 25 students/trainees

SPACE REQUIREMENT	SIZE IN METERS	AREA IN SQ. METERS	TOTAL AREA IN SQ. METERS
• Building (permanent)	13.00 x 15.00	195.00	195.00
• Student/Trainee Working Space	2.00 x 2.00 per student/trainee	4.00 per student	100.00
• Lecture Room	7.00 x 5.00	35.00	35.00
• Learning Resource Center (Library)	3.00 x 5.00	15.00	15.00
• Facilities/Equipment/ Circulation Area	13.00 x 15.00	195.00	195.00
• Livestock Farm*	100.00 x 100.00	10,000	10,000.00

Note: * Area will change according to availability of livestock farm for training, observation and demonstration.

3.6 TRAINER'S QUALIFICATIONS FOR AGRICULTURE SECTOR

ANIMAL HEALTH CARE AND MANAGEMENT NC III

TRAINER QUALIFICATION (TQ III)

- Must be a holder of Animal Health Care and Management NC III or its equivalent qualification
- Must have undergone training on Training Methodology III (TM III)
- *Must be computer literate
- Must be physically and mentally fit
- *Must have at least 2 years job/industry experience
- Must be a civil service eligible (for government position or appropriate professional license issued by the Professional Regulatory Commission)

* *Optional.* Only when required by the hiring institution.

Reference: TESDA Board Resolution No. 2004 03

3.7. INSTITUTIONAL ASSESSMENT

Institutional assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for each unit of competency.

SECTION 4 ASSESSMENT AND CERTIFICATION ARRANGEMENTS

- 4.1. To attain the National Qualification of Animal Health Care and Management NC III, the candidate must demonstrate competence in all the units listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the TESDA Director General.
- 4.2. The qualification of Animal Health Care and Management NC III may have specialization in either hog/pig/swine or cattle/ox.
 - 4.2.1. The qualification Animal Health Care and Management NC III (Hog/Pig/Swine) may be attained through accumulation of COCs in the following areas. The possession of COC in the Unit of Competency – Raise Swine (Unit Code AGR621303) is a prerequisite for taking the assessment in these areas:
 - 4.2.1.1. Administer drugs and biologics
 - 4.2.1.1.1. Restrain and handle animals
 - 4.2.1.1.2 Administer drugs and biologics
 - 4.2.1.2. Apply bio-security measures
 - 4.2.1.2.1. Restrain and handle animals
 - 4.2.1.2.2. Apply bio-security measures
 - 4.2.1.3. Collect and handle specimen
 - 4.2.1.3.1. Restrain and handle animals
 - 4.2.1.3.2. Collect and handle specimen
 - 4.2.1.4. Handle and store drugs and biologics
 - 4.2.2 The qualification Animal Health Care and Management NC III (Cattle/Ox) may be attained through accumulation of COCs in the following areas. The possession of COC in the Unit of Competency – Raise Large Ruminants (Unit Code AGR621304) is a prerequisite for taking the assessment in these areas:
 - 4.2.2.1 Administer drugs and biologics
 - 4.2.2.1.1. Restrain and handle animals
 - 4.2.2.1.2 Administer drugs and biologics
 - 4.2.2.2. Apply bio-security measures
 - 4.2.2.2.1. Restrain and handle animals
 - 4.2.2.2.2. Apply bio-security measures

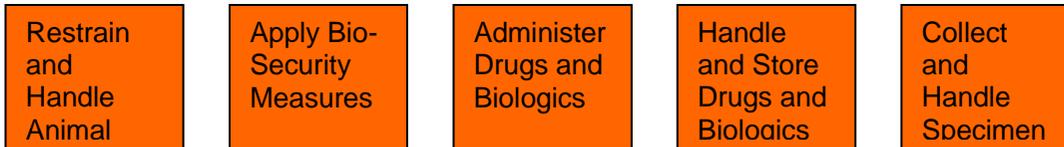
- 4.2.2.3. Collect and handle specimen
 - 4.2.2.3.1. Restrain and handle animals
 - 4.2.2.3.2 Collect and handle specimen

- 4.2.2.4 Handle and store drugs and biologics

- 4.3. Accumulation and submission of all COCs acquired for the relevant units of competency comprising this qualification, an individual shall be issues the corresponding National Certificate
- 4.4. Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.
- 4.5. The following are qualified to apply for assessment and certification:
 - 4.4.1 Graduates of formal, non-formal and informal including enterprise-based training programs
 - 4.4.2 Experienced Workers (wage employed or self-employed)
- 4.6. The guidelines on assessment and certification are discussed in detail in the Procedures Manual on Assessment and Certification and Guidelines on the Implementation of the Philippine TVET Qualification and Certification System (PTQCS).

COMPETENCY MAP

CORE COMPETENCIES

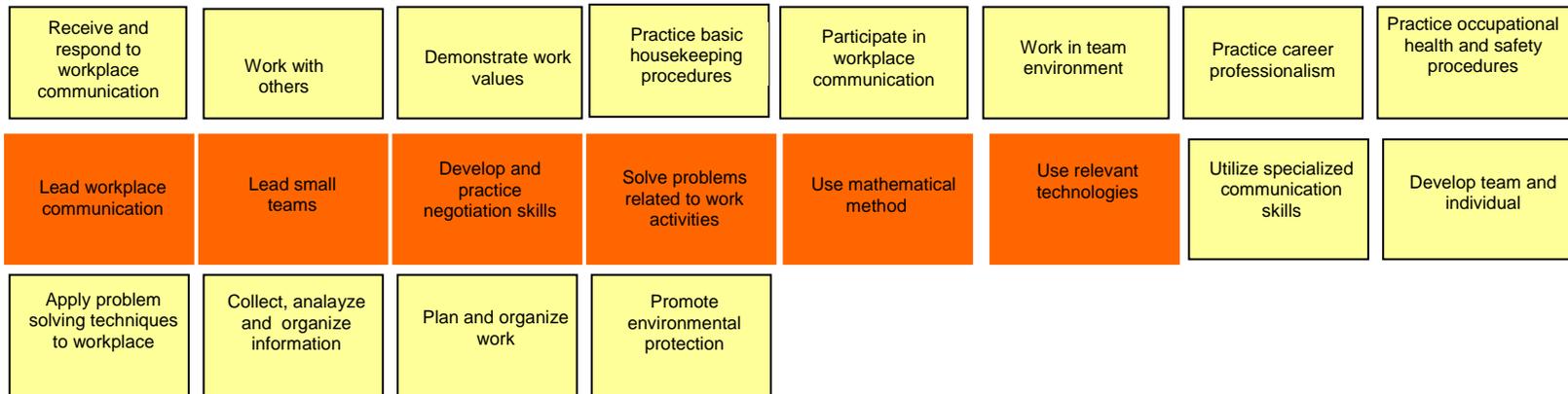


COMMON COMPETENCIES



Animal Health Care and Management NC III

BASIC COMPETENCIES



DEFINITION OF TERMS

Anaphylactic Shock – manifested by the acute inflammation of an immunized animal when injected. The peculiar characters of these reactions are dependent upon the site of entry of the irritating agent, which is the vascular system in one instance and tissue spaces in the other.

Calf – a newly born male or female cattle or buffalo

Culling – is the removal of undesirable or inferior animals in the herd based on important economic traits and overall performance

Gestation period – refers to the period of carrying the young in the womb

Farrowing – refers to the period of giving birth in pigs or swine

Dry animal – a sow or cow whose litter has been weaned but which has not yet been bred or is not pregnant

Heifer – a young female cattle or buffalo

Vaccination – a preventive measure to inoculate an animal with a mildly toxic preparation of bacteria or a virus of specific disease to prevent or to lessen the effects of the disease

Weanling – refers to a young animal of either sex which has been separated from the mother at the end of the lactation period

Livestock – domestic animals kept for use on a farm and raised for sale and profit

Selection – refers to the process of choosing males and females with desirable characteristics for replacement stocks

Biologics – agents, such as vaccines, that give immunity to diseases or harmful biotic stresses

Drug – a substance used in the diagnosis, treatment, or prevention of a disease or as a component of a medication

Specimen – a sample, as of tissue, blood, or urine, used for analysis and diagnosis

Bio-security – security from transmission of infectious diseases, parasites and pests. Biosecurity threats come from the possible introduction of a disease into a herd or flock, which is not known to have the disease. The introduction of disease usually will be of non-intentional nature

Subcutaneous – below or under the skin

LIST OF ABBREVIATIONS

BAI	-	Bureau of Animal Industry
NMIS	-	National Meat Inspection Service
PAHC	-	Philippine Animal Health Center
AO	-	Administrative Order
SOP	-	Standard Operating Procedure
DENR	-	Department of Environment and Natural Resources
IFAT	-	Immunoflourescent Antibody Test
RPL	-	Recognition of Prior Learning
UTPRAS-		United TVET Program Registration and Accreditation System
TVET	-	Technical Vocational Education and Training
DTS	-	Dual Training System
TQ	-	Trainer Qualification
TM	-	Training Methodology
COC	-	Certificate of Competency
NC	-	National Certificate
PTQCS-		Philippine TVET Qualification and Certification System

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