

# COMPETENCY STANDARDS



## DIGITAL AGRICULTURE LEVEL II

**AGRICULTURE, FORESTRY AND FISHERY  
SECTOR**

**TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY**  
TESDA Complex East Service Road, South Luzon Expressway (SLEX),  
Fort Bonifacio, Taguig City

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## AGRICULTURE, FORESTRY AND FISHERY SECTOR

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## COMPETENCY STANDARDS FOR DIGITAL AGRICULTURE LEVEL II

### Section 1 DIGITAL AGRICULTURE LEVEL II QUALIFICATION

The **DIGITAL AGRICULTURE LEVEL II** Qualification consists of competencies that a person must achieve on how to access farming information with the use of Smartphones and resources from the internet, manage agricultural activities, conduct agricultural marketing activities through the use of social media and agriculture applications and assess market opportunities to increase farm income.

The units of competency comprising this qualification include the following:

Code	BASIC COMPETENCIES
400311210	Participate in workplace communication
400311211	Work in team environment
400311212	Solve/address general workplace problems
400311213	Develop career and life decisions
400311214	Contribute to workplace innovation
400311215	Present relevant information
400311216	Practice occupational safety and health policies and procedures
400311217	Exercise efficient and effective sustainable practices in the workplace
400311218	Practice entrepreneurial skills in the workplace
Code	COMMON COMPETENCIES
AFF321203	Perform estimation and basic calculation
AFF321201	Apply safety measures in farm operations
HCS421201	Provide quality customer service
Code	CORE COMPETENCIES
ABAFF0203114611301	Access farming information
ABAFF0203114611302	Manage agricultural activities
ABAFF0203114611303	Conduct agricultural marketing activities

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

- Digital Farmer
- Farmer Entrepreneur

## 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 **DIGITAL AGRICULTURE LEVEL II**.

### BASIC COMPETENCIES

<b>UNIT OF COMPETENCY</b>	:	<b>PARTICIPATE IN WORKPLACE COMMUNICATION</b>
<b>UNIT CODE</b>	:	<b>400311210</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required to gather, interpret, and convey information in response to workplace requirements.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Obtain and convey workplace information	1.1 Specific and relevant information is accessed from <b>appropriate sources</b> . 1.2 Effective questioning, active listening and speaking skills are used to gather and convey information. 1.3 Appropriate <b>medium</b> is used to transfer information and ideas. 1.4 Appropriate non-verbal communication is used. 1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed. 1.6 Defined workplace procedures for the location and <b>storage</b> of information are used.	1.1 Effective verbal and nonverbal communication 1.2 Different modes of communication 1.3 Medium of communication in the workplace 1.4 Organizational policies 1.5 Communication procedures and systems 1.6 Lines of Communication 1.7 Technology relevant to the enterprise and the individual's work responsibilities 1.8 Workplace etiquette	1.1 Following simple spoken language 1.2 Performing routine workplace duties following simple written notices 1.3 Participating in workplace meetings and discussions 1.4 Preparing work-related documents 1.5 Estimating, calculating and recording routine workplace measures 1.6 Relating/ Interacting with people of various levels in the workplace 1.7 Gathering and providing basic information in response to workplace requirements

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	1.7 Personal interaction is carried out clearly and concisely.		1.8 Basic business writing skills 1.9 Interpersonal skills in the workplace 1.10 Active-listening skills
2. Perform duties following workplace instructions	2.1 Written notices and instructions are read and interpreted in accordance with organizational guidelines. 2.2 Routine written instruction are followed based on established procedures. 2.3 Feedback is given to workplace supervisor based instructions/ information received. 2.4 <b>Workplace interactions</b> are conducted in a courteous manner. 2.5 Where necessary, clarifications about routine workplace procedures and matters concerning conditions of employment are sought and asked from <b>appropriate sources</b> . 2.6 Meetings outcomes are interpreted and implemented.	2.1 Effective verbal and non-verbal communication 2.2 Different modes of communication 2.3 Medium of communication in the workplace 2.4 Organizational/ Workplace policies 2.5 Communication procedures and systems 2.6 Lines of communication 2.7 Technology relevant to the enterprise and the individual's work responsibilities 2.8 Effective questioning techniques (clarifying and probing) 2.9 Workplace etiquette	2.1 Following simple spoken instructions 2.2 Performing routine workplace duties following simple written notices 2.3 Participating in workplace meetings and discussions 2.4 Completing work-related documents 2.5 Estimating, calculating and recording routine workplace measures 2.6 Relating/ Responding to people of various levels in the workplace 2.7 Gathering and providing information in response to workplace requirements 2.8 Basic questioning/querying 2.9 Skills in reading for information 2.10 Skills in locating
3. Complete relevant work- related documents	3.1 Range of <b>forms</b> relating to conditions of employment are completed accurately and legibly. 3.2 Workplace data is recorded on standard workplace forms and documents.	3.1 Effective verbal and non-verbal communication 3.2 Different modes of communication 3.3 Workplace forms and documents 3.4 Organizational/ Workplace policies	3.1 Completing work-related documents 3.2 Applying operations of addition, subtraction, division and multiplication

ELEMENT	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	3.3 Errors in recording information on forms/ documents are identified and acted upon. 3.4 Reporting requirements to supervisor are completed according to organizational guidelines.	3.5 Communication procedures and systems 3.6 Technology relevant to the enterprise and the individual's work responsibilities	3.3 Gathering and providing information in response to workplace requirements 3.4 Effective record keeping skills

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Appropriate sources	May include: 1.1 Team members 1.2 Supervisor/Department Head 1.3 Suppliers 1.4 Trade personnel 1.5 Local government 1.6 Industry bodies
2. Medium	May include: 2.1 Memorandum 2.2 Circular 2.3 Notice 2.4 Information dissemination 2.5 Follow-up or verbal instructions 2.6 Face-to-face communication 2.7 Electronic media (disk files, cyberspace)
3. Storage	May include: 3.1 Manual filing system 3.2 Computer-based filing system
4. Workplace interactions	May include: 4.1 Face-to-face 4.2 Telephone 4.3 Electronic and two-way radio 4.4 Written including electronic means, memos, instruction and forms 4.5 Non-verbal including gestures, signals, signs and diagrams
5. Forms	May include: 5.1 HR/Personnel forms, telephone message forms, safety reports

## EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p><b>Assessment requires evidence that the candidate:</b></p> <p>1.1 Prepared written communication following standard format of the organization</p> <p>1.2 Accessed information using workplace communication equipment/systems</p> <p>1.3 Made use of relevant terms as an aid to transfer information effectively</p> <p>1.4 Conveyed information effectively adopting formal or informal communication</p>
<p>2. Resource Implications</p>	<p><b>The following resources should be provided:</b></p> <p>2.1 Fax machine</p> <p>2.2 Telephone</p> <p>2.3 Notebook</p> <p>2.4 Writing materials</p> <p>2.5 Computer with Internet connection</p>
<p>3. Methods of Assessment</p>	<p><b>Competency in this unit may be assessed through:</b></p> <p>3.1 Demonstration with oral questioning</p> <p>3.2 Interview</p> <p>3.3 Written test</p> <p>3.4 Third-party report</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed individually in the actual workplace or through an accredited institution</p>



<b>UNIT OF COMPETENCY</b>	:	<b>WORK IN A TEAM ENVIRONMENT</b>
<b>UNIT CODE</b>	:	<b>400311211</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the skills, knowledge, and attitudes to identify one's roles and responsibilities as a member of a team.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Describe team role and scope	1.1 The <b>role and objective of the team</b> is identified from available <b>sources of information</b> . 1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.	1.1 Group structure 1.2 Group development 1.3 Sources of information	1.1 Communicating with others, appropriately consistent with the culture of the workplace 1.2 Developing ways in improving work structure and performing respective roles in the group or organization
2. Identify one's role and responsibility within a team	2.1 Individual roles and responsibilities within the team environment are identified. 2.2 Roles and objectives of the team is identified from available <b>sources of information</b> . 2.3 Team parameters, reporting relationships and responsibilities are identified based on team discussions and appropriate external sources.	2.1 Team roles and objectives 2.2 Team structure and parameters 2.3 Team development 2.4 Sources of information	2.1 Communicating with others, appropriately consistent with the culture of the workplace 2.2 Developing ways in improving work structure and performing respective roles in the group or organization
3. Work as a team member	3.1 Effective and appropriate forms of communications are used and interactions undertaken with team members based on company practices. 3.2 Effective and appropriate contributions made to	3.1 Communication Process 3.2 Workplace communication protocol 3.3 Team planning and decision making 3.4 Team thinking 3.5 Team roles	3.1 Communicating appropriately, consistent with the culture of the workplace 3.2 Interacting effectively with others 3.3 Deciding as an individual and as a

ELEMENT	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>complement team activities and objectives, based on <b><i>workplace context</i></b>.</p> <p>3.3 Protocols in reporting are observed based on standard company practices.</p> <p>3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives.</p>	<p>3.6 Process of team development</p> <p>3.7 Workplace context</p>	<p>group using group think strategies and techniques</p> <p>3.4 Contributing to Resolution of issues and concerns</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Role and objective of team	May include: 1.1 Work activities in a team environment with enterprise or specific sector 1.2 Limited discretion, initiative and judgement maybe demonstrated on the job, either individually or in a team environment
2. Sources of information	May include: 2.1 Standard operating and/or other workplace procedures 2.2 Job procedures 2.3 Machine/equipment manufacturer's specifications and instructions 2.4 Organizational or external personnel 2.5 Client/supplier instructions 2.6 Quality standards 2.7 OHS and environmental standards
3. Workplace context	May include: 3.1 Work procedures and practices 3.2 Conditions of work environments 3.3 Legislation and industrial agreements 3.4 Standard work practice including the storage, safe handling and disposal of chemicals 3.5 Safety, environmental, housekeeping and quality guidelines

## EVIDENCE GUIDE

1. Critical aspects of Competency	<p><b>Assessment requires evidence that the candidate:</b></p> <ul style="list-style-type: none"> <li>1.1 Worked in a team to complete workplace activity</li> <li>1.2 Worked effectively with others</li> <li>1.3 Conveyed information in written or oral form</li> <li>1.4 Selected and used appropriate workplace language</li> <li>1.5 Followed designated work plan for the job</li> </ul>
2. Resource Implications	<p><b>The following resources should be provided:</b></p> <ul style="list-style-type: none"> <li>2.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</li> <li>2.2 Materials relevant to the proposed activity or tasks</li> </ul>
3. Methods of Assessment	<p><b>Competency in this unit may be assessed through:</b></p> <ul style="list-style-type: none"> <li>3.1 Role play involving the participation of individual member to the attainment of organizational goal</li> <li>3.2 Case studies and scenarios as a basis for discussion of issues and strategies in teamwork</li> <li>3.3 Socio-drama and socio-metric methods</li> <li>3.4 Sensitivity techniques</li> <li>3.5 Written Test</li> </ul>
4. Context for Assessment	<ul style="list-style-type: none"> <li>4.1 Competency may be assessed in workplace or in a simulated workplace setting</li> <li>4.2 Assessment shall be observed while task are being undertaken whether individually or in group</li> </ul>

UNIT OF COMPETENCY	:	<b>SOLVE/ADDRESS GENERAL WORKPLACE PROBLEMS</b>
UNIT CODE	:	<b>400311212</b>
UNIT DESCRIPTOR	:	This unit covers the knowledge, skills and attitudes required to apply problem-solving techniques to determine the origin of problems and plan for their resolution. It also includes addressing procedural problems through documentation, and referral.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify routine problems	1.1 Routine <b>problems or procedural problem</b> areas are identified. 1.2 Problems to be investigated are defined and determined. 1.3 Current conditions of the problem are identified and documented.	1.1 Current industry hardware and software products and services 1.2 Industry maintenance, service and helpdesk practices, processes and procedures 1.3 Industry standard diagnostic tools 1.4 Malfunctions and resolutions	1.1 Identifying current industry hardware and software products and services 1.2 Identifying current industry maintenance, services and helpdesk practices, processes and procedures. 1.3 Identifying current industry standard diagnostic tools 1.4 Describing common malfunctions and resolutions. 1.5 Determining the root cause of a routine malfunction
2. Look for solutions to routine problems	2.1 Potential solutions to problem are identified. 2.2 Recommendations about possible solutions are developed, <b>documented</b> , ranked and presented to <b>appropriate person</b> for decision.	2.1 Current industry hardware and software products and services 2.2 Industry service and helpdesk practices, processes and procedures 2.3 Operating systems 2.4 Industry standard diagnostic tools 2.5 Malfunctions and resolutions. 2.6 Root cause analysis	2.1 Identifying current industry hardware and software products and services 2.2 Identifying services and helpdesk practices, processes and procedures. 2.3 Identifying operating system

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
			2.4 Identifying current industry standard diagnostic tools 2.5 Describing common malfunctions and resolutions. 2.6 Determining the root cause of a routine malfunction
3. Recommend solutions to problems	3.1 Implementation of solutions are <b><i>planned.</i></b> 3.2 Evaluation of implemented solutions are planned. 3.3 Recommended solutions are documented and submit to appropriate person for confirmation.	3.1 Standard procedures 3.2 Documentation produce	3.1 Producing documentation that recommends solutions to problems 3.2 Following established procedures

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Problems/Procedural Problem	May include: 1.1 Routine/non – routine processes and quality problems 1.2 Equipment selection, availability and failure 1.3 Teamwork and work allocation problem 1.4 Safety and emergency situations and incidents 1.5 Work-related problems outside of own work area
2. Appropriate person	May include: 2.1 Supervisor or manager 2.2 Peers/work colleagues 2.3 Other members of the organization
3. Document	May include: 3.1 Electronic mail 3.2 Briefing notes 3.3 Written report 3.4 Evaluation report
4. Plan	May include: 4.1 Priority requirements 4.2 Co-ordination and feedback requirements 4.3 Safety requirements 4.4 Risk assessment 4.5 Environmental requirements

## EVIDENCE GUIDE

1. Critical aspects of Competency	<p><b>Assessment requires evidence that the candidate:</b></p> <p>1.1 Determine the root cause of a routine problem.          1.2 Identified solutions to procedural problems.          1.3 Produced documentation that recommends solutions to problems.          1.4 Followed established procedures.          1.5 Referred unresolved problems to support persons.</p>
2. Resource Implications	<p>2.1 Assessment will require access to a workplace over an extended period, or a suitable method of gathering evidence of operating ability over a range of situations.</p>
3. Methods of Assessment	<p><b>Competency in this unit may be assessed through:</b></p> <p>3.1 Case Formulation          3.2 Life Narrative Inquiry          3.3 Standardized test</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>
4. Context for Assessment	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions.</p>



<b>UNIT OF COMPETENCY</b>	:	<b>DEVELOP CAREER AND LIFE DECISIONS</b>
<b>UNIT CODE</b>	:	<b>400311213</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills, and attitudes in managing one's emotions, developing reflective practice, and boosting self-confidence and developing self-regulation.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Manage one's emotion	1.1 <b>Self-management strategies</b> are identified. 1.2 Skills to work independently and to show initiative, to be conscientious, and persevering in the face of setbacks and frustrations are developed. 1.3 Techniques for effectively handling negative emotions and <b>unpleasant situation</b> in the workplace are examined.	1.1 Self-management strategies that assist in regulating behavior and achieving personal and learning goals (e.g. Nine self-management strategies according to Robert Kelley) 1.2 Enablers and barriers in achieving personal and career goals 1.3 Techniques in handling negative emotions and unpleasant situation in the workplace such as frustration, anger, worry, anxiety, etc.	1.1 Managing properly one's emotions and recognizing situations that cannot be changed and accept them and remain professional 1.2 Developing self-discipline, working independently and showing initiative to achieve personal and career goals 1.3 Showing confidence, and resilience in the face of setbacks and frustrations and other negative emotions and unpleasant situations in the workplace
2. Develop reflective practice	2.1 Personal strengths and achievements, based on self-assessment strategies and teacher feedback are contemplated. 2.2 Progress when seeking and responding to feedback from teacher to assist them in consolidating strengths addressing	2.1 Basic SWOT analysis 2.2 Strategies to improve one's attitude in the workplace 2.3 Gibbs' Reflective Cycle/Model (Description, Feelings, Evaluation, Analysis,	2.1 Using the basic SWOT analysis as self-assessment strategy 2.2 Developing reflective practice through realization of limitations, likes/ dislikes; through showing of self-confidence 2.3 Demonstrating self-acceptance

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
	<p>weaknesses and fulfilling their potential are monitored.</p> <p>2.3 Outcomes of personal and academic challenges by reflecting on previous problem solving and decision making strategies and feedback from peers and teachers are predicted.</p>	<p>Conclusion, and Action plan)</p>	<p>and being able to accept challenges</p>
<p>3. Boost self-confidence and develop self-regulation</p>	<p>3.1 Efforts for continuous self-improvement are demonstrated.</p> <p>3.2 Counter-productive tendencies at work are eliminated.</p> <p>3.3 Positive outlook in life are maintained.</p>	<p>3.1 Four components of self-regulation based on Self-Regulation Theory (SRT)</p> <p>3.2 Personality development concepts</p> <p>3.3 Self-help concepts (e. g., 7 Habits by Stephen Covey, transactional analysis, psycho-spiritual concepts)</p>	<p>3.1 Performing effective communication skills – reading, writing, conversing skills</p> <p>3.2 Showing affective skills – flexibility, adaptability, etc.</p> <p>3.3 Self-assessment for determining one’s strengths and weaknesses</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Self-management strategies	May include: 1.1 Seeking assistance in the form of job coaching or mentoring 1.2 Continuing dialogue to tackle workplace grievances 1.3 Collective negotiation/bargaining for better working conditions 1.4 Share your goals to improve with a trusted co-worker or supervisor 1.5 Make a negativity log of every instance when you catch yourself complaining to others 1.6 Make lists and schedules for necessary activities
2. Unpleasant situation	May include: 2.1 Job burn-out 2.2 Drug dependence 2.3 Sulking

## EVIDENCE GUIDE

1. Critical aspects of Competency	<b>Assessment requires evidence that the candidate:</b> 1.1 Express emotions appropriately 1.2 Work independently and show initiative 1.3 Consistently demonstrate self-confidence and self-discipline
2. Resource Implications	<b>The following resources should be provided:</b> 2.1 Access to workplace and resources 2.2 Case studies
3. Methods of Assessment	<b>Competency in this unit may be assessed through:</b> 3.1 Demonstration or simulation with oral questioning 3.2 Case problems involving work improvement and sustainability issues 3.3 Third-party report
4. Context for Assessment	4.1 Competency assessment may occur in workplace or any appropriately simulated environment.

<b>UNIT OF COMPETENCY</b>	:	<b>CONTRIBUTE TO WORKPLACE INNOVATION</b>
<b>UNIT CODE</b>	:	<b>400311214</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required to make a pro-active and positive contribution to workplace innovation.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Identify opportunities to do things better	1.1 <b>Opportunities for improvement</b> are identified proactively in own area of work. 1.2 <b>Information</b> are gathered and reviewed which may be relevant to ideas and which might assist in gaining support for idea.	1.1 Roles of individuals in suggesting and making improvements 1.2 Positive impacts and challenges in innovation 1.3 Types of changes and responsibility 1.4 Seven habits of highly effective people	1.1 Identifying opportunities to improve and to do things better. Involvement 1.2 Identifying the positive impacts and the challenges of change and innovation 1.3 Identifying examples of the types of changes that are within and outside own scope of responsibility
2. Discuss and develop ideas with others	2.1 <b>People who could provide input</b> to ideas for improvements are identified. 2.2 Ways of approaching people to begin sharing ideas are selected. 2.3 Meeting is set with relevant people. 2.4 Ideas for follow up are review and selected based on feedback. 2.5 <b>Critical inquiry method</b> is used to discuss and develop ideas with others.	2.1 Roles of individuals in suggesting and making improvements 2.2 Positive impacts and challenges in innovation 2.3 Types of changes and responsibility 2.4 Seven habits of highly effective people	2.1 Identifying opportunities to improve and to do things better. Involvement 2.2 Identifying the positive impacts and the challenges of change and innovation 2.3 Providing examples of the types of changes that are within and outside own scope of responsibility 2.4 Communicating ideas for change through small group discussions and meetings

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Integrate ideas for change in the workplace	3.1 Critical inquiry method is used to integrate different ideas for change of key people. 3.2 Summarizing, analyzing and generalizing skills are used to extract salient points in the pool of ideas. 3.3 <b>Reporting skills</b> are likewise used to communicate results. 3.4 <b>Current Issues and concerns</b> on the systems, processes and procedures, as well as the need for simple innovative practices are identified.	3.1 Roles of individuals in suggesting and making improvements 3.2 Positive impacts and challenges in innovation 3.3 Types of changes and responsibility 3.4 Seven habits of highly effective people 3.5 Basic research skills	3.1 Identifying opportunities to improve and to do things better. Involvement 3.2 Identifying the positive impacts and the challenges of change and innovation 3.3 Providing examples of the types of changes that are within and outside own scope of responsibility 3.4 Communicating ideas for change through small group discussions and meetings 3.5 Demonstrating skills in analysis and interpretation of data

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Opportunities for improvement	May include: 1.1 Systems 1.2 Processes 1.3 Procedures 1.4 Protocols 1.5 Codes 1.6 Practices
2. Information	May include: 2.1 Workplace communication problems 2.2 Performance evaluation results 2.3 Team dynamics issues and concerns 2.4 Challenges on return of investment 2.5 New tools, processes and procedures 2.6 New people in the organization
3. People who could provide input	May include: 3.1 Leaders 3.2 Managers 3.3 Specialists 3.4 Associates 3.5 Researchers 3.6 Supervisors 3.7 Staff 3.8 Consultants (external) 3.9 People outside the organization in the same field or similar expertise/industry 3.10 Clients
4. Critical inquiry method	May include: 4.1 Preparation 4.2 Discussion 4.3 Clarification of goals 4.4 Negotiate towards a Win-Win outcome 4.5 Agreement 4.6 Implementation of a course of action 4.7 Effective verbal communication. See our pages: Verbal Communication and Effective Speaking 4.8 Listening 4.9 Reducing misunderstandings is a key part of effective negotiation 4.10 Rapport Building 4.11 Problem Solving 4.12 Decision Making 4.13 Assertiveness 4.14 Dealing with Difficult Situations
5. Reporting skills	May include: 5.1 Data management 5.2 Coding

VARIABLE	RANGE
	5.3 Data analysis and interpretation 5.4 Coherent writing 5.5 Speaking

## EVIDENCE GUIDE

1. Critical aspects of Competency	<p><b>Assessment requires evidence that the candidate:</b></p> <p>1.1 Identified opportunities to do things better. 1.2 Discussed and developed ideas with others on how to contribute to workplace innovation. 1.3 Integrated ideas for change in the workplace. 1.4 Analyzed and reported rooms for innovation and learning in the workplace.</p>
2. Resource Implications	<p><b>The following resources should be provided:</b></p> <p>2.1 Pens, papers and writing implements 2.2 Cartolina 2.3 Manila papers</p>
3. Methods of Assessment	<p><b>Competency in this unit may be assessed through:</b></p> <p>3.1 Psychological and behavioral Interviews 3.2 Performance Evaluation 3.3 Life Narrative Inquiry 3.4 Review of portfolios of evidence and third-party workplace reports of on-the-job performance 3.5 Sensitivity analysis 3.6 Organizational analysis 3.7 Standardized assessment of character strengths and virtues applied</p>
4. Context for Assessment	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions.</p>

<b>UNIT OF COMPETENCY</b>	:	<b>PRESENT RELEVANT INFORMATION</b>
<b>UNIT CODE</b>	:	<b>400311215</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required to present data/information appropriately.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Gather data/information	1.1 Evidence, facts and information are collected. 1.2 Evaluation, terms of reference and conditions are reviewed to determine whether data/information falls within project scope.	1.1 Organizational protocols 1.2 Confidentiality 1.3 Accuracy 1.4 Business mathematics and statistics 1.5 Data analysis techniques/procedures 1.6 Reporting requirements to a range of audiences 1.7 Legislation, policy and procedures relating to the conduct of evaluations 1.8 Organizational values, ethics and codes of conduct	1.1 Describing organizational protocols relating to client liaison 1.2 Protecting confidentiality 1.3 Describing accuracy 1.4 Computing business mathematics and statistics 1.5 Describing data analysis techniques/procedures 1.6 Reporting requirements to a range of audiences 1.7 Stating legislation, policy and procedures relating to the conduct of evaluations 1.8 Stating organizational values, ethics and codes of conduct
2. Assess gathered data/information	2.1 Validity of data/information is assessed. 2.2 Analysis techniques are applied to assess data/information. 2.3 Trends and anomalies are identified. 2.4 <b>Data analysis techniques</b> and procedures are documented.	2.1 Business mathematics and statistics 2.2 Data analysis techniques/procedures 2.3 Reporting requirements to a range of audiences 2.4 Legislation, policy and procedures relating to the	2.1 Computing business mathematics and statistics 2.2 Describing data analysis techniques/procedures 2.3 Reporting requirements to a range of audiences



<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
	2.5 Recommendations are made on areas of possible improvement.	conduct of evaluations 2.5 Organisational values, ethics and codes of conduct	2.4 Stating legislation, policy and procedures relating to the conduct of evaluations 2.5 Stating organisational values, ethics and codes of conduct
3. Record and present information	Studied data/information are recorded. Recommendations are analysed for action to ensure they are compatible with the project's scope and terms of reference. Interim and final reports are analysed and outcomes are compared to the criteria established at the outset. Findings are presented to stakeholders.	3.1 Data analysis techniques/ procedures 3.2 Reporting requirements to a range of audiences 3.3 Legislation, policy and procedures relating to the conduct of evaluations 3.4 Organisational values, ethics and codes of conduct	3.1 Describing data analysis techniques/ procedures 3.2 Reporting requirements to a range of audiences 3.3 Stating legislation, policy and procedures relating to the conduct of evaluations 3.4 Stating organisational values, ethics and codes of conduct practices

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Data analysis techniques	May include: 1.1 Domain analysis 1.2 Content analysis 1.3 Comparison technique

## EVIDENCE GUIDE

1. Critical aspects of Competency	<p><b>Assessment requires evidence that the candidate:</b></p> 1.1 Determine data / information 1.2 Studied and applied gathered data/information 1.3 Recorded and studied data/information
	<p>These aspects may be best assessed using a range of scenarios 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>
2. Resource Implications	<p><b>Specific resources for assessment</b></p> 2.1 Evidence of competent performance should be obtained by observing an individual in an information management role within the workplace or operational or simulated environment.
3. Methods of Assessment	<p><b>Competency in this unit may be assessed through:</b></p> 3.1 Written Test 3.2 Interview 3.3 Portfolio
	<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>
4. Context for Assessment	4.1 In all workplaces, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.

<b>UNIT OF COMPETENCY</b>	:	<b>PRACTICE OCCUPATIONAL SAFETY AND HEALTH POLICIES AND PROCEDURES</b>
<b>UNIT CODE</b>	:	<b>400311216</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required to identify OSH compliance requirements, prepare OSH requirements for compliance, perform tasks in accordance with relevant OSH policies and procedures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Identify OSH compliance requirements	1.1 Relevant <b>OSH requirements, regulations, policies and procedures</b> are identified in accordance with workplace policies and procedures. 1.2 OSH activity non-conformities are conveyed to <b>appropriate personnel</b> . 1.3 <b>OSH preventive and control requirements</b> are identified in accordance with OSH work policies and procedures.	1.1 OSH preventive and control requirements 1.2 Hierarchy of Controls 1.3 Hazard Prevention and Control 1.4 General OSH principles 1.5 Work standards and procedures 1.6 Safe handling procedures of tools, equipment and materials 1.7 Standard emergency plan and procedures in the workplace	1.1 Communication skills 1.2 Interpersonal skills 1.3 Critical thinking skills 1.4 Observation skills
2. Prepare OSH requirements for compliance	2.1 OSH work activity material, tools and equipment requirements are identified in accordance with workplace policies and procedures. 2.2 Required OSH materials, tools and equipment are acquired in accordance with workplace policies and procedures.	2.1 Resources necessary to execute hierarchy of controls 2.2 General OSH principles 2.3 Work standards and procedures 2.4 Safe handling procedures of tools, equipment and materials 2.5 Different OSH control measures	2.1 Communication skills 2.2 Estimation skills 2.3 Interpersonal skills 2.4 Critical thinking skills 2.5 Observation skills 2.6 Material, tool and equipment identification skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	2.3 Required OSH materials, tools and equipment are arranged/ placed in accordance with OSH work standards.		
3. Perform tasks in accordance with relevant OSH policies and procedures	3.1 Relevant OSH work procedures are identified in accordance with workplace policies and procedures. 3.2 Work Activities are executed in accordance with OSH work standards. 3.3 <b>Non-compliance work activities</b> are reported to appropriate personnel.	3.1 OSH work standards 3.2 Industry related work activities 3.3 General OSH principles 3.4 OSH Violations Non-compliance work activities	3.1 Communication skills 3.2 Interpersonal skills 3.3 Troubleshooting skills 3.4 Critical thinking skills 3.5 Observation skills

## RANGE OF VARIABLES

VARIABLE	RANGE
1. OSH Requirements, Regulations, Policies and Procedures	May include: 1.1 Clean Air Act 1.2 Building code 1.3 National Electrical and Fire Safety Codes 1.4 Waste management statutes and rules 1.5 Permit to Operate 1.6 Philippine Occupational Safety and Health Standards 1.7 Department Order No. 13 (Construction Safety and Health) 1.8 ECC regulations
2. Appropriate Personnel	May include: 2.1 Manager 2.2 Safety Officer 2.3 EHS Offices 2.4 Supervisors 2.5 Team Leaders 2.6 Administrators 2.7 Stakeholders 2.8 Government Official 2.9 Key Personnel 2.10 Specialists 2.11 Himself
3. OSH Preventive and Control Requirements	May include: 3.1 Resources needed for removing hazard effectively 3.2 Resources needed for substitution or replacement 3.3 Resources needed to establishing engineering controls 3.4 Resources needed for enforcing administrative controls 3.5 Personal Protective equipment
4. Non OSH-Compliance Work Activities	May include non-compliance or observance of the following safety measures: 4.1 Violations that may lead to serious physical harm or death 4.2 Fall Protection 4.3 Hazard Communication 4.4 Respiratory Protection 4.5 Power Industrial Trucks 4.6 Lockout/Tag-out 4.7 Working at heights (use of ladder, scaffolding) 4.8 Electrical Wiring Methods 4.9 Machine Guarding 4.10 Electrical General Requirements 4.11 Asbestos work requirements 4.12 Excavations work requirements

## EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p><b>Assessment requires evidence that the candidate:</b></p> <p>1.1 Convey OSH work non-conformities to appropriate personnel</p> <p>1.2 Identify OSH preventive and control requirements in accordance with OSH work policies and procedures</p> <p>1.3 Identify OSH work activity material, tools and equipment requirements in accordance with workplace policies and procedures</p> <p>1.4 Arrange/Place required OSH materials, tools and equipment in accordance with OSH work standards</p> <p>1.5 Execute work activities in accordance with OSH work standards</p> <p>1.6 Report OSH activity non-compliance work activities to appropriate personnel</p>
<p>2. Resource Implications</p>	<p><b>The following resources should be provided:</b></p> <p>2.1 Facilities, materials tools and equipment necessary for the activity</p>
<p>3. Methods of Assessment</p>	<p><b>Competency in this unit may be assessed through:</b></p> <p>3.1 Observation/Demonstration with oral questioning</p> <p>3.2 Third party report</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed in the work place or in a simulated work place setting</p>

<b>UNIT OF COMPETENCY</b>	:	<b>EXERCISE EFFICIENT AND EFFECTIVE SUSTAINABLE PRACTICES IN THE WORKPLACE</b>
<b>UNIT CODE</b>	:	<b>400311217</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers knowledge, skills and attitude to identify the efficiency and effectiveness of resource utilization, determine causes of inefficiency and/or ineffectiveness of resource utilization and Convey inefficient and ineffective environmental practices.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Identify the efficiency and effectiveness of resource utilization	1.1 Required resource utilization in the workplace is measured using appropriate techniques. 1.2 Data are recorded in accordance with workplace protocol. 1.3 Recorded data are compared to determine the efficiency and effectiveness of resource utilization according to established <b>environmental work procedures</b> .	1.1 Importance of Environmental Literacy 1.2 Environmental Work Procedures 1.3 Waste Minimization 1.4 Efficient Energy Consumptions	1.1 Recording Skills 1.2 Writing Skills 1.3 Innovation Skills
2. Determine causes of inefficiency and/or ineffectiveness of resource utilization	2.1 Potential causes of inefficiency and/or ineffectiveness are listed. 2.2 Causes of inefficiency and/or ineffectiveness are identified through deductive reasoning. 2.3 Identified causes of inefficiency and/or ineffectiveness are validated thru established environmental procedures.	2.1 Causes of environmental inefficiencies and ineffectiveness	2.1 Deductive Reasoning Skills 2.2 Critical thinking 2.3 Problem Solving 2.4 Observation Skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Convey inefficient and ineffective environmental practices	3.1 Efficiency and effectiveness of resource utilization are reported to <b><i>appropriate personnel.</i></b> 3.2 Concerns related resource utilization are discussed with appropriate personnel. 3.3 Feedback on information/ concerns raised are clarified with appropriate personnel.	3.1 Appropriate Personnel to address the environmental hazards 3.2 Environmental corrective actions	3.1 Written and Oral Communication Skills 3.2 Critical thinking 3.3 Problem Solving 3.4 Observation Skills 3.5 Practice Environmental Awareness



## RANGE OF VARIABLES

VARIABLE	RANGE
1. Environmental Work Procedures	May include: 1.1 Utilization of Energy, Water, Fuel Procedures 1.2 Waste Segregation Procedures 1.3 Waste Disposal and Reuse Procedures 1.4 Waste Collection Procedures 1.5 Usage of Hazardous Materials Procedures 1.6 Chemical Application Procedures 1.7 Labeling Procedures
2. Appropriate Personnel	May include: 2.1 Manager 2.2 Safety Officer 2.3 EHS Offices 2.4 Supervisors 2.5 Team Leaders 2.6 Administrators 2.7 Stakeholders 2.8 Government Official 2.9 Key Personnel 2.10 Specialists 2.11 Himself

## EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p><b>Assessment requires evidence that the candidate:</b></p> <p>1.1 Measured required resource utilization in the workplace using appropriate techniques</p> <p>1.2 Recorded data in accordance with workplace protocol</p> <p>1.3 Identified causes of inefficiency and/or ineffectiveness through deductive reasoning</p> <p>1.4 Validate the identified causes of inefficiency and/or ineffectiveness thru established environmental procedures</p> <p>1.5 Report efficiency and effectiveness of resource utilization to appropriate personnel</p> <p>1.6 Clarify feedback on information/concerns raised with appropriate personnel</p>
<p>2. Resource Implications</p>	<p><b>The following resources should be provided:</b></p> <p>2.1 Workplace</p> <p>2.2 Tools, materials and equipment relevant to the tasks</p> <p>2.3 PPE</p> <p>2.4 Manuals and references</p>
<p>3. Methods of Assessment</p>	<p><b>Competency in this unit may be assessed through:</b></p> <p>3.1 Demonstration</p> <p>3.2 Oral questioning</p> <p>3.3 Written examination</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency assessment may occur in workplace or any appropriately simulated environment</p> <p>4.2 Assessment shall be observed while task are being undertaken whether individually or in-group</p>

UNIT OF COMPETENCY	:	PRACTICE ENTREPRENEURIAL SKILLS IN THE WORKPLACE
UNIT CODE	:	400311218
UNIT DESCRIPTOR	:	This unit covers the outcomes required to apply entrepreneurial workplace best practices and implement cost-effective operations.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Apply entrepreneurial workplace best practices	<p>1.1 <b>Good practices</b> relating to workplace operations are observed and selected following workplace policy.</p> <p>1.2 Quality procedures and practices are complied with according to workplace requirements.</p> <p>1.3 Cost-conscious habits in <b>resource utilization</b> are applied based on industry standards.</p>	<p>1.1 Workplace best practices, policies and criteria</p> <p>1.2 Resource utilization</p> <p>1.3 Ways in fostering entrepreneurial attitudes:</p> <ul style="list-style-type: none"> <li>● Patience</li> <li>● Honesty</li> <li>● Quality-consciousness</li> <li>● Safety-consciousness</li> <li>● Resourcefulness</li> </ul>	<p>1.1 Communication skills</p> <p>1.2 Complying with quality procedures</p>
2. Communicate entrepreneurial workplace best practices	<p>2.1 Observed good practices relating to workplace operations are communicated to the <b>appropriate person</b>.</p> <p>2.2 Observed quality procedures and practices are communicated to appropriate person</p> <p>2.3 Cost-conscious habits in resource utilization are communicated based on industry standards.</p>	<p>2.1 Workplace best practices, policies and criteria</p> <p>2.2 Resource utilization</p> <p>2.3 Ways in fostering entrepreneurial attitudes:</p> <ul style="list-style-type: none"> <li>● Patience</li> <li>● Honesty</li> <li>● Quality-consciousness</li> <li>● Safety-consciousness</li> <li>● Resourcefulness</li> </ul>	<p>2.1 Communication skills</p> <p>2.2 Complying with quality procedures</p> <p>2.3 Following workplace communication protocol</p>
3. Implement cost-effective operations	<p>3.1 Preservation and optimization of workplace resources is implemented in</p>	<p>3.1 Optimization of workplace resources</p> <p>3.2 5S procedures and concepts</p>	<p>3.1 Implementing preservation and optimizing workplace resources</p>

ELEMENT	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>accordance with enterprise policy</p> <p>3.2 Judicious use of workplace tools, equipment and materials are observed according to manual and work requirements.</p> <p>3.3 Constructive contributions to office operations are made according to enterprise requirements.</p> <p>3.4 Ability to work within one's allotted time and finances is sustained.</p>	<p>3.3 Criteria for cost-effectiveness</p> <p>3.4 Workplace productivity</p> <p>3.5 Impact of entrepreneurial mindset to workplace productivity</p> <p>3.6 Ways in fostering entrepreneurial attitudes:</p> <ul style="list-style-type: none"> <li>● Quality-consciousness</li> <li>● Safety-consciousness</li> </ul>	<p>3.2 Observing judicious use of workplace tools, equipment and materials</p> <p>3.3 Making constructive contributions to office operations</p> <p>3.4 Sustaining ability to work within allotted time and finances</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Good practices	May include: 1.1 Economy in use of resources 1.2 Documentation of quality practices
2. Resources utilization	May include: 2.1 Consumption/ use of consumables 2.2 Use/Maintenance of assigned equipment and furniture 2.3 Optimum use of allotted /available time

## EVIDENCE GUIDE

1. Critical aspects of competency	<b>Assessment requires evidence that the candidate:</b> 1.1 Demonstrated ability to identify and sustain cost-effective activities in the workplace 1.2 Demonstrated ability to practice entrepreneurial knowledge, skills and attitudes in the workplace.
2. Resource Implications	<b>The following resources should be provided:</b> 2.1 Simulated or actual workplace 2.2 Tools, materials and supplies needed to demonstrate the required tasks 2.3 References and manuals 2.3.1 Enterprise procedures manuals 2.3.2 Company quality policy
3. Methods of Assessment	<b>Competency in this unit should be assessed through:</b> 3.1 Interview 3.2 Third-party report
4. Context of Assessment	4.1 Competency may be assessed in workplace or in a simulated workplace setting 4.2 Assessment shall be observed while tasks are being undertaken whether individually or in-group

## COMMON COMPETENCIES

UNIT OF COMPETENCY	:	PERFORM ESTIMATION AND BASIC CALCULATIONS
UNIT CODE	:	AFF321203
UNIT DESCRIPTOR	:	This unit covers the knowledge, skills and attitudes required to perform basic workplace calculations.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
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.	1.1 Job requirements/ labor needs 1.2 Calculation of quantities of materials and resources required 1.3 Calculation of time for job completion 1.4 Preparation of estimate report 1.5 Basic mathematical operations 1.6 Percentage and ratios 1.7 Unit Conversion	1.1 Identifying job requirements/ labor 1.2 Estimating quantities of materials and resources required 1.3 Estimating time for job completion 1.4 Performing basic calculation 1.5 Compute percentage 1.6 Convert English to Metric systems of measurement 1.7 Preparing estimate report
2. Perform basic workplace calculation	2.1 <b>System and units of measurement</b> to be followed are ascertained. 2.2 Calculation needed to complete work tasks are performed using the <b>four basic mathematical operation</b> . 2.3 Calculate whole fraction, percentage and mixed when are used to complete the instructions.	2.1 Four basic mathematical operation 2.2 System and units of measurement 2.3 Fraction, percentage and ratio 2.4 Materials takeoff 2.5 Material costing	2.1 Compute bill of materials 2.2 Compute project cost

	2.4 Number computed is checked following work requirements.		
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## RANGE OF VARIABLES

VARIABLE	RANGE
1. Four basic mathematical operation	1.1 Addition 1.2 Subtraction 1.3 Multiplication 1.4 Division
2. System of measurement	2.1 English 2.2 Metric
3. Units of measurement	3.1 Area 3.2 Volume 3.3 Weight 3.4 Length



## EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Performed estimation 1.2 Performed basic workplace calculation 1.3 Applied corrective measures as maybe necessary
2. Resource Implications	2.1 Relevant tools and equipment for basic calculation 2.2 Recommended data
3. Method of Assessment	Competency in this unit must be assessed through: 3.1 Practical demonstration 3.2 Written examination
4. Context of Assessment	4.1 Assessment may occur in the workplace or as part of a team under limited supervision

<b>UNIT OF COMPETENCY</b>	:	<b>APPLY SAFETY MEASURES IN FARM OPERATIONS</b>
<b>UNIT CODE</b>	:	<b>AFF 321201</b>
<b>UNIT DESCRIPTOR</b>	:	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.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Determine areas of concern for safety measures	1.1 <b>Work tasks</b> are identified in line with farm operations 1.2 <b>Place</b> for safety measures are determined in line with farm operations 1.3 <b>Time</b> for safety measures are determined in line with farm operations 1.4 Appropriate <b>tools, materials and outfits</b> are prepared in line with job requirements	<input type="checkbox"/> Different work tasks in farm operations <input type="checkbox"/> Place and time for implementation of safety measures <input type="checkbox"/> Different hazards in the workplace <input type="checkbox"/> Types of tools, materials and outfits <input type="checkbox"/> Preparation of tools, materials and outfits	1.1 Identifying work tasks in farm operations 1.2 Determining place and time for implementation of safety measures 1.3 Reading labels, manuals and other basic safety information 1.4 Identifying effective/functional tools, materials and outfit 1.5 Preparing tools, materials and outfits 1.6 Discarding defective tools, and materials
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 <b>Emergency procedures</b> are known and followed to ensure a safe work requirement 2.5 <b>Hazards</b> in the workplace are	<input type="checkbox"/> Uses and functions of tools <input type="checkbox"/> Outfits and how to wear it. <input type="checkbox"/> Expiration/shelf life of materials <input type="checkbox"/> Proper disposal of expired materials <input type="checkbox"/> Environmental rules and regulations <input type="checkbox"/> Disaster Risk and Reduction Management <input type="checkbox"/> Emergency Procedures · Hazards identification and reporting	<input type="checkbox"/> Using tools and materials in the workplace <input type="checkbox"/> Wearing of outfits <input type="checkbox"/> Observing expiration/shelf life of materials <input type="checkbox"/> Disposing of expired materials <input type="checkbox"/> Following emergency procedures <input type="checkbox"/> Identifying and reporting of hazards in workplace area

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	identified and reported in line with farm guidelines	<ul style="list-style-type: none"> <li>· Climate Change Adaptation and Mitigation</li> <li>· Communication skills</li> <li>· OSHS</li> </ul>	
3. Safekeep/ dispose tools, materials and outfit	<p>3.1 Used tools and outfit are cleaned after use and stored in designated areas</p> <p>3.2 Unused materials are properly labeled and stored according to manufacturer's recommendation and farm requirements</p> <p>3.3 <b>Waste materials</b> are disposed according to manufacturers, government and farm requirements.</p>	<p>3.1 Procedures of cleaning used tools and outfits</p> <p>3.2 Label and storage unused materials</p> <p>3.3 disposal of waste materials</p> <p>3.4 Manufacturer's recommendation on keeping materials</p> <p>3.5 Environmental rules and regulations</p>	<p>3.1 Cleaning used tools and outfits</p> <p>3.2 Labeling and storing unused materials</p> <p>3.3 Disposing waste materials</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Work tasks	Work task may be selected from any of the subsectors: 1.1 Crop Production 1.2 Post-harvest 1.3 Agri-marketing 1.4 Farm Equipmen
2. Place	2.1 Stock room/storage areas/warehouse 2.2 Field/farm/orchard
3. Time	3.1 Fertilizer and pesticides application 3.2 Feed mixing and feeding 3.3 Harvesting and hauling
4. Tools, materials and outfits	4.1 Tools 4.1.1 Wrenches 4.1.2 Screw driver 4.1 3 Pliers 4.2 Outfits 4.2.1 Masks 4.2.2 Gloves 4.2.3 Boots 4.2.4 Overall coats 4.2.5 Hat 4.2.6 Eye goggles
5. Emergency procedures	5.1 Location of first aid kit 5.2 Evacuation 5.3 Agencies contact 5.4 Farm emergency procedures
6. Hazards	6.1 Chemical 6.2 Electrical 6.3 Falls

## EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 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 Cleaned and stored tools, materials and outfit in designated facilities
2. Resource Implications	3.1 Farm location 3.2 Tools, equipment and outfits appropriate in applying safety measures
3. Methods of Assessment	Competency in this unit must be assessed through: 2.1 Practical demonstration 2.2 Third Party Report
4. Context for Assessment	4.1 Assessment may occur in the workplace or in a simulated workplace or as part of a team under limited supervision

UNIT OF COMPETENCY	:	<b>PROVIDE QUALITY CUSTOMER SERVICE</b>
UNIT CODE	:	<b>HCS421201</b>
UNIT DESCRIPTOR	:	This unit covers the knowledge, skill and attitudes required to provide effective and efficient services to the clients of the microfinance industry.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Update knowledge of products and services	1.1 Products and/or services to be marketed are identified, familiarized with and fully understood 1.2 Information on programs is accessed 1.3 Knowledge on <b>products, services and programs</b> are updated 1.4 Additional information on products, services and programs are prepared	<input type="checkbox"/> Introduction to Microfinance <input type="checkbox"/> Terms and definitions <input type="checkbox"/> Organization profile <input type="checkbox"/> MFIs products and services (financial and non-financial): <input type="checkbox"/> Loans <input type="checkbox"/> Savings <input type="checkbox"/> Insurance <input type="checkbox"/> Trainings <input type="checkbox"/> Marketing Assistance <input type="checkbox"/> MFIs programs <input type="checkbox"/> Organization procedures and processes in providing quality customer service <input type="checkbox"/> Work values and ethics: <input type="checkbox"/> Quality consciousness <input type="checkbox"/> Proactive <input type="checkbox"/> Patience <input type="checkbox"/> Information awareness	<input type="checkbox"/> Effective oral communication skills <input type="checkbox"/> Listening skills <input type="checkbox"/> Motivational skills <input type="checkbox"/> Interpersonal skills <input type="checkbox"/> Presentation skills <input type="checkbox"/> Demonstrating cost/benefits/ value to clients based on client's expectations and needs <input type="checkbox"/> Generating several alternative solutions that will meet customer's needs <input type="checkbox"/> Data gathering skills <input type="checkbox"/> Computer literacy
2. Assess needs of New and existing clients	2.1 Active listening is used to gather information from <b>clients</b>	<input type="checkbox"/> Terms and definitions <input type="checkbox"/> Methods of assessing needs of	

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	2.2 Orientation on program and policies are conducted 2.3 Identified related or applicable <b>needs</b> of clients based on the products/services and program being offered 2.4 Provided clients with courteous and professional treatment throughout the interaction using <b>interactive communication</b> 2.5 Inquiries, concerns and comments are responded to promptly and accurately in accordance with organization's policies 2.6 Recorded all the gathered information given by the clients	new and existing client's: <input type="checkbox"/> Interviewing <input type="checkbox"/> Observation <input type="checkbox"/> Focus Group Discussion <input type="checkbox"/> Needs Survey <input type="checkbox"/> Procedures in conducting product and service orientation of clients <input type="checkbox"/> Procedures in assessing needs of new and existing client's <input type="checkbox"/> Procedure in innovating products and services <input type="checkbox"/> Guidelines on recording and reporting clients' needs <input type="checkbox"/> Work values and ethics: <input type="checkbox"/> Quality consciousness <input type="checkbox"/> Proactive <input type="checkbox"/> Clients focus <input type="checkbox"/> Patience <input type="checkbox"/> Vigilance <input type="checkbox"/> Sincerity <input type="checkbox"/> Integrity <input type="checkbox"/> Commitment	
3. Conduct client satisfaction survey	3.1 Client satisfaction survey is administered 3.2 Survey results are collated and analyzed 3.3 Positive and Negative results are defined 3.4 Negative feedbacks are well addressed immediately through appropriate <b>communication strategies</b>	<input type="checkbox"/> Terms and definitions <input type="checkbox"/> Client satisfaction survey methodologies: <input type="checkbox"/> Interviewing <input type="checkbox"/> Observation <input type="checkbox"/> Focus Group Discussion <input type="checkbox"/> Structured Field Survey <input type="checkbox"/> Survey Process: <input type="checkbox"/> Purpose of survey <input type="checkbox"/> Designing survey instruments	

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		<ul style="list-style-type: none"> <li><input type="checkbox"/> Designing interview and FGD guides</li> <li><input type="checkbox"/> Administering survey instruments</li> <li><input type="checkbox"/> Interviewing target respondents</li> <li><input type="checkbox"/> Conducting FGD</li> <li><input type="checkbox"/> Data processing, analysis and presentation</li> <li><input type="checkbox"/> Recommendations</li> <li><input type="checkbox"/> How feedback from survey results are address</li> <li><input type="checkbox"/> Work values and ethics: <ul style="list-style-type: none"> <li><input type="checkbox"/> Quality consciousness</li> <li><input type="checkbox"/> Proactive</li> <li><input type="checkbox"/> Patience</li> <li><input type="checkbox"/> Sincerity</li> <li><input type="checkbox"/> Integrity</li> <li><input type="checkbox"/> Commitment</li> <li><input type="checkbox"/> Courteous</li> <li><input type="checkbox"/> Professional</li> </ul> </li> </ul>	



## NO RANGE OF VARIABLES

VARIABLE	RANGE
1. Product/services and programs	Includes the following but are not limited to: 1.1 Financial services 1.2 Non-financial services
2. Clients	2.1 Entrepreneurial poor
3. Needs	3.1 Designing client's satisfaction survey instruments 3.2 Procedure in administering client's satisfaction survey 3.3 Processing client's satisfaction survey data 3.4 Product/service knowledge 3.5 Knowledge of programs
4. Interactive communication	4.1 Information is gathered in a courteous and professional manner 4.2 Probing skills 4.3 Skills in effective questioning 4.4 Consistent service quality for all types of customers 4.5 Avoiding controversial issues like politics and religion
5. Communication strategies	5.1 One-on-one interaction 5.2 Group meetings

## EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Received, assessed, and responded to client needs 1.2 Applied organizational quality procedures and processes in providing quality service
2. Resource Implications	The following resources MUST be provided: 2.1 Meeting venue/s 2.2 Equipment and furnishings appropriate to a microfinance set-up 2.3 Complete information on products, services, and programs 2.4 Products, services, and programs brochures 2.5 Organization's standard forms for clients
3. Methods of Assessment	Competency may be assessed through: 3.1 Oral questioning 3.2 Written test 3.3 Practical demonstration
4. Context for Assessment	4.1 Assessment may be conducted in the workplace or in a simulated workplace environment

## CORE COMPETENCIES

<b>UNIT OF COMPETENCY</b>	:	<b>ACCESS FARMING INFORMATION</b>
<b>UNIT CODE</b>	:	<b>ABAFF0203114611301</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required in accessing farming information using smartphone, agri-ICT tools, and advanced mobile agriculture applications

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Operate Smartphone	1.1 Smartphone is prepared based on the required manufacturer's manual 1.2 Parts and functions of <b>smartphones</b> are identified based on the required manufacturer's manual 1.3 Contacts are saved following manufacturer's manual 1.4 Phone calls are performed following manufacturer's manual 1.5 Text messaging are performed following manufacturer's manual 1.6 Photo documentation is performed based on standard procedure 1.7 Safety practices are applied following manufacturer's manual	<b>SCIENCE</b> 1.1 Telecommunication services, such as telephony <b>TECHNOLOGY</b> 1.2 Basic functions of Cellular Phone 1.3 Mobile phones and handheld gadgets operations 1.4 Basic operation of smartphone in: <ul style="list-style-type: none"> <li>• sending and receiving texts, photographs, and multimedia messages, registering contacts</li> </ul> Calculator, currency conversion, alarm etc. functions <b>ENVIRONMENTAL AND OTHER RELATED LAWS</b> 1.6 Ergonomics and in the use of smartphones	1.1 Skills in operating Smartphone 1.2 Applying skills in describing and using smartphones 1.3 Skills in mobile phone operation 1.4 Identifying parts and functions of smartphones 1.5 Communication skills 1.6 Recordkeeping skills 1.7 Aesthetic skills 1.8 Applying safety
2. Access Internet	2.1 <b>Internet connection</b> is checked and used based on industry practices 2.2 <b>Emails</b> are accessed and used based on user's requirements	<b>TECHNOLOGY</b> 2.1-Importance of internet connection 2.2 Types and functions of internet connection	2.1. Communication skills 2.2 Internet browsing and forum chatting skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>2.3 <b>Search engines</b> are utilized based on user's requirements</p> <p>2.4 Online protection from scams are applied following <b>Internet safety</b></p> <p>2.5 Scamming incident is reported following industry practice</p>	<p>2.5 Different types of search engines</p> <p>2.6 Knowledge of common email providers</p> <p><b>COMMUNICATION</b></p> <p>2.9 Data communications</p> <p>2.10 Browsing the internet using mobile browser</p> <p>Video chat</p> <p><b>ENVIRONMENTAL AND OTHER RELATED LAWS</b></p> <p>2.4 Internet and email etiquette</p> <p>2.7 OSHS on internet use</p> <p>2.8 Awareness on R.A. 10173 Data Privacy Act of 2012</p>	<p>2.3 Mobile phone operation skills</p> <p>2.4 Mobile internet/network configuration skills</p> <p>2.5 Basic Internet search</p>
3. Utilize Basic Agri-ICT Tools	<p>3.1 <b>Social media platform</b> and <b>Agri-ICT tools</b> are identified based on farming practices</p> <p>3.2 Applications are installed based on user's requirements</p> <p>3.3 Topics from agri-digital learning resources are selected and registered following application requirements</p> <p>3.4 Gathered information are stored according to agricultural activities</p>	<p><b>TECHNOLOGY</b></p> <p>3.1 Different social media platform</p> <p>3.2 Different Agri-ICT Tools and their uses</p> <p>3.2 Installation of social media applications and Agri-ICT tools</p> <p>3.5 Registration process in Agri-digital learning resources</p> <p><b>ENVIRONMENTAL AND OTHER RELATED LAWS</b></p> <p>3.3 Internet safety</p> <p>3.4 Awareness in gathered information for storage</p>	<p>3.1. Communication skills</p> <p>3.2. Internet browsing and forum chatting skills</p> <p>3.3. Mobile phone operation skills</p> <p>3.5. Mobile internet/network configuration skills</p> <p>3.6. Installing application skills</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		3.6 Awareness on R.A. 10173 Data Privacy Act of 2012	
4. Utilize advanced mobile agriculture applications	<p>4.1 Agricultural farm is assessed according to industry standards.</p> <p>4.2 <b>Digital decision support tools</b> are selected based on the result of the agricultural farm assessment</p> <p>4.3 <b>Digital decision support tools</b> are applied based on the result of agricultural farm assessment</p> <p>4.3 Photo documentation is performed according to industry standards</p> <p>4.2 Information sharing is performed using social media applications and QR code</p>	<p><b>TECHNOLOGY</b></p> <p>4.1 Different digital decision support tools</p> <p>4.2 Websites generating QR codes</p> <p>4.3 Use of QR codes</p> <p>4.4 Photo documentation</p> <p><b>ENVIRONMENTAL AND OTHER RELATED LAWS</b></p> <p>4.5 Awareness on R.A. 10173 Data Privacy Act of 2012</p>	<p>4.1 Communication skills</p> <p>4.2 Internet browsing and forum chatting skills</p> <p>4.3 Mobile phone operation skills</p> <p>4.4 Mobile internet/network configuration skills</p> <p>4.5 Installing application skills</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Digital decision support tools	Digital decision support tools may include 1.1 Binhing palay: for seed selection and preparation Nutrient management application 1.2 Leaf color computing application 1.3 Minus one element technique (MOET) kit and application 1.4 Rice crop manager advisory service 1.5 Pest management application 1.6 E-damuhan application
2. Smartphone	Smartphone may include: 2.1 iPhone 2.2 Windows Phone 2.3 Android Phone 2.4 Amazons Fire Phone
3. Internet connection	Internet connection may include: 3.1 DSL (digital subscriber line) 3.2 Cable broadband. 3.3 Fiber optic broadband. 3.4 Wireless or Wi-Fi broadband. 3.5 Satellite and mobile broadband. 3.6 Dedicated leased line.
4. Search Engines	Search Engines may include: 4.1 Google. 4.2 Bing. 4.3 Baidu. 4.4 Yahoo 4.5 Ask.com.
5. Agri ICT tools	Agri ICT tools may include: 4.1 Pinoy Rice Knowledge Bank 4.2 eExtension Program 4.3 PhilRice Text Center 4.4 Farmers' Contact Center
6. Emails	Emails may include: 6.1 Gmail 6.2 Microsoft 6.3 Yahoo
7. Internet Safety	Internet Safety may include: 7.1 Strong password 7.2 Data privacy settings are set-up 7.3 Limit data sharing 7.4 Practice safe browsing 7.5 Check application reviews

<b>VARIABLE</b>	<b>RANGE</b>
8. Social media platforms	Social media platforms may include: 8.1 YouTube 8.2 Facebook 8.3 Instagram 8.4 Tiktok 8.5 Twitter 8.6 Pinterest

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidences that the candidate:</p> <p>1.1 Operated smart phone.</p> <ul style="list-style-type: none"> <li>1.1.1 Prepared smartphone.</li> <li>1.1.2 Identified parts and functions of smartphones.</li> <li>1.1.3 Saved contacts.</li> <li>1.1.4 Performed phone calls</li> <li>1.1.5 Performed text messaging.</li> <li>1.1.6 Performed photo documentation.</li> <li>1.1.7 Applied safety practices.</li> </ul> <p>1.2 Accessed internet.</p> <ul style="list-style-type: none"> <li>1.2.1 Accessed and used Emails.</li> <li>1.2.2 Utilized search engines.</li> <li>1.2.3 Applied online protection from scams.</li> <li>1.2.4 Reported scamming incident.</li> </ul> <p>1.3 Utilized Basic Agri-ICT Tools.</p> <ul style="list-style-type: none"> <li>1.3.1 Identify social media applications and Agri-ICT tools.</li> <li>1.3.2 Installed applications.</li> <li>1.3.3 Chosen and registered topics from agri-digital learning resources.</li> </ul> <p>1.4 Utilized advance mobile agricultural applications.</p> <ul style="list-style-type: none"> <li>1.4.1 Assessed agricultural farm.</li> <li>1.4.2 Selected digital decision support tools</li> <li>1.4.3 Applied digital decision support tools</li> <li>1.4.4 Performed photo documentation</li> </ul>
<p>2. Resource Implications</p>	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> <li>2.1 Smartphone</li> <li>2.2 Internet access</li> <li>2.3 Operational handbook/manuals</li> </ul>
<p>3. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Written Exam</li> <li>3.2 Demonstration with oral questioning</li> <li>3.3 Direct Observation</li> </ul>
<p>4. Context for Assessment</p>	<p>4.1 Assessment may be conducted in the workplace or in a simulated workplace environment</p>



<b>UNIT OF COMPETENCY</b>	:	<b>MANAGE AGRICULTURAL ACTIVITIES</b>
<b>UNIT CODE</b>	:	<b>ABAFF0203114611302</b>
<b>UNIT DESCRIPTOR</b>	:	This unit covers the knowledge, skills and attitudes required in managing agricultural activities with the use of Agri-ICT tools.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Monitor agricultural activities	<p>1.1 Plant diagnosis is performed using <b>Agri ICT tools</b>.</p> <p>1.2 Pests and diseases are identified according to <b>Agri ICT tools</b> manual.</p> <p>1.3 Plant nutrients are determined based on <b>Agri ICT tools</b>.</p> <p>1.4 <b>Agricultural activities</b> are recorded based on the industry requirement</p>	<p><b>SCIENCE</b></p> <p>1.1 Anatomy of plants</p> <p>1.2 Plant diseases</p> <p>1.3 Types/Kinds of plant pest/diseases</p> <p>1.4 Plant nutrients</p> <p><b>TECHNOLOGY</b></p> <p>1.5 Agri ICT tools in diagnosing plant diseases, pests, and nutrients</p> <p><b>COMMUNICATION</b></p> <p>1.6 Record keeping</p> <p><b>ENVIRONMENT AND OTHER RELATED LAWS</b></p> <p>RA 10173 Data privacy act</p>	<p>1.1 Technical skills</p> <p>1.2 Communication skills</p> <p>1.3 Task skills</p> <p>1.4 Task management skills</p> <p>1.5 Using other digital agri-tools/apps</p> <p>Diagnosing skills</p>
2. Evaluate agricultural activities	<p>2.1 Corrective and preventive measures are gathered based on recommendation of <b>Agri ICT tools</b>.</p> <p>2.2 Corrective and Preventive measures are analyzed based on recommendation of <b>Agri ICT tools</b>.</p> <p>2.3 Corrective measures are selected based on</p>	<p><b>SCIENCE</b></p> <p>2.1 Control measures of insects / pests</p> <p>2.2 Procedures /steps in controlling pests, plant diseases</p> <p><b>TECHNOLOGY</b></p>	<p>2.1 Technical skills</p> <p>2.2 Communication skills</p> <p>2.3 Task skills</p> <p>2.4 Task management skills</p> <p>Critical thinking skills</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>recommendation of <b>Agri ICT tools</b>.</p> <p>2.4 Report is prepared and submitted according to gathered <b>Agri ICT tools</b> recommendations.</p>	<p>2.3 Preventive measures</p> <p><b>COMMUNICATION</b></p> <p>2.4 Written report</p>	
3. Apply improvements on agricultural activities	<p>3.1 Control and management of pests and diseases are applied based on Agri ICT tools recommendations.</p> <p>3.2 Accurate amount of fertilizer is applied based on Agri ICT tools recommendations.</p> <p>3.3 Crop is determined based on <b>season</b>.</p> <p>3.4 Seeds are selected according to <b>Agri ICT tools recommendations on seeds</b>.</p> <p>3.5 Information sharing is performed using <b>Agri ICT tools</b>.</p> <p>3.6 Safety practices are applied following OSHS.</p>	<p><b>SCIENCE</b></p> <p>3.1 Control measures of insects / pests</p> <p>3.2 Procedures /steps in controlling pests, plant diseases</p> <p>3.3 Types of fertilizer</p> <p>3.4 Type of season</p> <p>3.5 Classification of seeds</p> <p>3.6 Types of seeds</p> <p><b>TECHNOLOGY</b></p> <p>3.7 Application of fertilizer</p> <p><b>MATH</b></p> <p>3.8 Ratio and proportion</p> <p><b>ENVIRONMENT AND OTHER LAWS</b></p> <p>3.9 Farm safety and handling of agrichemicals</p> <p>3.10 Awareness of RA 9003- Ecological solid waste management of 2000</p>	<p>3.1 Technical skills</p> <p>3.2 Communication skills</p> <p>3.3 Task skills</p> <p>3.4 Task management skills</p> <p>3.5 Critical thinking skills</p> <p>3.6 Internet browsing and forum chatting skills</p> <p>3.7 Mobile phone operation skills</p> <p>Applying safety practices</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. Agricultural activities	Agricultural activities may include: <ul style="list-style-type: none"> <li>1.1 Perform plant diagnosis</li> <li>1.2 Identify pests and diseases</li> <li>1.3 Select and prepare seeds</li> <li>1.4 Determine plant nutrients</li> <li>1.5 Identify suitable crops depending on the weather condition</li> </ul>
2. Agri ICT tools	Agri ICT tools may include but not limited to: <ul style="list-style-type: none"> <li>2.1 Pinoy Rice Knowledge Bank</li> <li>2.2 eExtension Program</li> <li>2.3 PhilRice Text Center</li> <li>2.4 Farmers' Contact Center</li> <li>2.5 Plant Doctor</li> <li>2.6 SPIDTECH</li> <li>2.7 Agri-Doc</li> <li>2.8 Rice Knowledge Bank</li> <li>2.9 Rice Doctor Beta</li> <li>2.10 MOET App</li> <li>2.11 PRIME</li> <li>2.12 Binhing Palay</li> <li>2.13 Leaf Color Computing App (LCC)</li> </ul>
3. Season	Season includes: <ul style="list-style-type: none"> <li>3.1 Dry season</li> <li>3.2 Wet season</li> </ul>
4. Agri ICT tools recommendations on seeds	Agri ICT tools recommendations on seeds may include: <ul style="list-style-type: none"> <li>4.1 Type of farmland</li> <li>4.2 Weather condition</li> <li>4.3 Season</li> <li>4.4 Certified seed</li> </ul>

## EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Monitored agricultural activities.</p> <p>1.1.1 Performed plant diagnosis.</p> <p>1.1.2 Identified pests and diseases.</p> <p>1.1.3 Determined plant nutrients.</p> <p>1.1.4 Recorded agricultural activities.</p> <p>1.2 Evaluated agricultural activities.</p> <p>1.2.1 Analyzed corrective measures.</p> <p>1.2.2 Selected corrective measures.</p> <p>1.3 Applied improvements on agricultural activities.</p> <p>1.3.1 Applied control and management of pests and Diseases.</p> <p>1.3.2 Applied accurate amount of fertilizer.</p> <p>1.3.3 Determined crop is based on season.</p> <p>1.3.4 Selected seeds</p> <p>1.3.5 Performed Information sharing</p> <p>1.3.6 Applied safety practices.</p>
<p>2. Resource Implications</p>	<p>The following resources MUST be provided:</p> <p>2.1 Smartphone</p> <p>2.2 Internet access</p> <p>2.3 Operational handbook/manuals</p>
<p>3. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <p>3.1 Written examination</p> <p>3.2 Interview</p> <p>3.3 Practical demonstration</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions</p>

<b>UNIT OF COMPETENCY</b>	:	<b>CONDUCT AGRICULTURAL MARKETING ACTIVITIES</b>
<b>UNIT CODE</b>	:	<b>ABAFF0203114611303</b>
<b>UNIT DESCRIPTOR</b>	:	The unit deals with the knowledge, skills, and attitudes required of a farm owner in the promotion and selling of its products through social media platforms.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>Italicized terms</i> are elaborated in the Range of Variables	<b>REQUIRED KNOWLEDGE</b>	<b>REQUIRED SKILLS</b>
1. Prepare social media marketing plan	1.1 <b>4P's of marketing</b> are identified based on industry standards. 1.2 <b>Social media marketing plan</b> is accomplished based on industry standards. 1.3 Social media product contents are prepared based on the accomplished marketing plan. 1.4 Approval of social media marketing plan is sought following industry standards.	<b>TECHNOLOGY</b> 1.1 Social media marketing plan 1.2 Design social media posts 1.3 Different applications in creating social media posters/ads 1.4 Social media content creation 1.5 Photography  <b>COMMUNICATION</b> 1.6 4Ps of social media Marketing Plan  <b>ENVIRONMENT AND OTHER LAWS</b> 3 Awareness on RA 10173 Data privacy act	1.1 Communication skills 1.2 Analytical skills 1.3 Developing social marketing plan 1.4 Creating social media marketing strategy 1.5 Creative thinking skills 1.6 Photography skill
2. Develop social media product content	2.1 Social media product content is <b>prepared</b> based on industry requirements. 2.2 <b>Design applications</b> is identified based on industry requirements 2.3 Social media product	<b>TECHNOLOGY</b> 2.1 Different design applications 2.2 Guide to mobile apps design 2.3 Design product content	2.1 Technical skills 2.2 Communication skills 2.3 Creative thinking skills 2.4 Applying internet safety

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>content is laid out using <b>design application</b>.</p> <p>2.4 Social media product content is secured as per industry standards.</p> <p>2.5 Social media product content is <b>verified</b> based on legal and privacy standards.</p> <p>2.6 Social media product content is revised based on feedback.</p>		
3. Utilize digital marketing platform	<p>3.1 <b>Social media marketing platforms</b> are identified and selected based on user's need.</p> <p>3.2 Features of <b>social media marketing platforms</b> are used following protocols.</p> <p>3.3 <b>Internet Safety</b> measures are applied based on industry standards.</p>	<p><b>TECHNOLOGY</b></p> <p>3.3 Digital marketing strategies</p> <p><b>COMMUNICATION</b></p> <p>3.2 Social media marketing platforms</p> <p>3.3 Social media features</p> <p><b>ENVIRONMENT AND OTHER LAWS</b></p> <p>3.4 Awareness on Intellectual property code. RA 8293</p> <p>3.5 Awareness on RA 10173 Data privacy act</p> <p>3.6 Internet safety</p>	<p>3.1 Technical skills</p> <p>3.2 Communication skills</p> <p>3.3 Creative thinking skills</p> <p>3.4 Applying internet safety</p>
4. Use e-commerce payment system	<p>4.1 <b>e-Commerce payment system</b> is identified and selected based on the availability in the locality.</p> <p>4.2 Application is installed in smartphone</p>	<p><b>TECHNOLOGY</b></p> <p>4.1 Types of e-commerce payment system</p> <p>4.2 Types of payment options</p> <p>4.3 Benefits, advantages, and</p>	<p>4.1 Installing e-commerce payment system application</p> <p>4.2 Technical skills</p> <p>4.3 Communication skills</p> <p>4.4 Creative thinking skills</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>according to selected e-commerce payment system.</p> <p>4.3 <b>Registration requirements</b> are provided based on the selected e-commerce payment system</p> <p>4.4 Online transactions are performed based on the selected e-commerce payment system</p> <p>4.5 Online transactions are tracked based on the selected e-commerce payment system.</p> <p>4.6 <b>Internet Safety</b> measures are applied based on industry standards.</p>	<p>disadvantages of online transaction</p> <p><b>MATH</b></p> <p>4.4 Basic mathematical operation</p> <p><b>COMMUNICATION</b></p> <p>4.5 Different requirements for online transactions</p> <p><b>ENVIRONMENT AND OTHER LAWS</b></p> <p>4.6 Awareness on Intellectual property code. RA 8293</p> <p>4.7 Awareness on RA 10173 Data privacy act</p> <p>4.8 Internet safety</p>	<p>4.5 Applying internet safety</p> <p>4.6 Computation skills</p>

## RANGE OF VARIABLES

VARIABLE	RANGE
1. 4P's of marketing	4P's of marketing includes: 1.1 Products 1.2 Price 1.3 Place 1.4 Promotions
2. Social media marketing plan	Social media marketing plan may include: 1.1 Products 2.2 Objective 2.3 Type of clients 2.4 Date of posting 2.5 When to post 2.6 Where to post
3. Design applications	Design applications may include: 3.1 Canva 3.2 Photoshop 3.3 Publisher 3.4 Adobe Lightroom Mobile
4. Social media marketing platforms	Social media marketing platforms may include: 4.1 Lazada 4.2 Shopee 4.3 Alibaba 4.4 Facebook 4.5 YouTube 4.6Tiktok 4.7 Pinterest 4.8Instagram
5. Preparation of social media product content	Preparation of social media product content may include: 5.1 Gathering of pictures, slogan, logo 5.2 Selecting lay-out 5.3 Posting of price 5.4 Display of product origin
6. Internet Safety	Internet Safety may include: 6.1. Use strong password 6.2. Keep personal information private 6.3 Pay attention to software updates 6.4 Back-up your personal data 6.5 Be careful about Wi-fi 6.6 Set-up two factors authentications
7. Verification of Social media product content	Verification of Social media product content may include: 7.1 Accuracy 7.2 Suitability 7.3 Compliance
8. e-Commerce payment system	e-Commerce payment system may include: 8.1 Pay Maya



	8.2 Gcash 8.3 Mobile Payment
9. Registration requirements	Registration requirements may include: 9.1 Business name 9.2 Business Address 9.3 Home Address 9.4 Official email 9.5 Contact Number 9.6 Complete Name

## EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Prepared social media marketing plan.               <ul style="list-style-type: none"> <li>1.1.1 Accomplished social media marketing plan.</li> <li>1.1.2 Prepared social media contents.</li> </ul> </li> <li>2.1 Developed social media product content.               <ul style="list-style-type: none"> <li>2.1.1 Prepared social media product content.</li> <li>2.1.2 Laid out social media product content.</li> <li>2.1.3 Secured social media product content.</li> <li>2.1.4 Verified social media product content.</li> </ul> </li> <li>3.1 Utilized digital marketing platform.               <ul style="list-style-type: none"> <li>3.1.1 Used social media features in marketing products.</li> <li>3.1.2 Applied internet safety measures.</li> </ul> </li> <li>4.1 Used e-commerce payment system.               <ul style="list-style-type: none"> <li>4.1.1 Installed desired type of e-commerce payment system.</li> <li>4.1.2 Provided registration requirements.</li> <li>4.1.3 Performed online transactions.</li> <li>4.1.4 Applied internet safety.</li> </ul> </li> </ul>
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> <li>2.1 Smartphone</li> <li>2.2 Internet access</li> <li>2.3 Operational handbook/manuals</li> </ul>
<p>3. Method of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Written Exam</li> <li>3.2 Demonstration with oral questioning</li> <li>3.3 Direct Observation</li> </ul>
<p>4. Context of Assessment</p>	<p>4.1 Assessment may be conducted in the workplace or in a simulated workplace environment.</p>

## **SECTION 3 TRAINING ARRANGEMENTS**

### **3.1 TRAINEE ENTRY REQUIREMENTS**

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

- Basic communication skills
- Basic mathematical skills
- Basic knowledge in using smartphone

This list does not include specific institutional requirements such as educational attainment, appropriate work experience, and others that may be required of the trainees by the school or training center delivering the TVET program.

### **3.2 TRAINER'S QUALIFICATIONS FOR AGRICULTURE, FORESTRY AND FISHERY SECTOR**

Trainers who will deliver the training on **DIGITAL AGRICULTURE LEVEL II** should have the following:

- Must be a holder of Training of Trainer's Certificate in Digital Agriculture Course (DAC); or

Must be a holder of Training Certificate on Digital Agriculture Level II and Trainer's Methodology Certificate (TMC)

- Must have one (1) year industry experience within the last 3 years.

## GLOSSARY OF TERMS

1 <b>Advanced mobile agriculture applications</b>	Refers to digital decision support tools.
2 <b>Agri ICT tools</b>	are important tools which provide daily information and other various purposes to farmers based on their needs. It enables the dissemination of essential information to the farmers at the right time.
3 <b>Digital Agriculture</b>	is often used to describe different the use of data collected by different types of technology used in the sector. However, it is also about how this technology integrates and works across the supply chain, all the way from the paddock to the consumer.
4 <b>E-commerce (electronic commerce)</b>	is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. It is conducted over computers, tablets, smartphones, and other smart devices.
5 <b>E-Payment</b>	is an electronic payment or digital transaction between two parties. E-payment types include ACH, wire and bank transfers, cards, digital wallets, mobile pay and more. Any number of different factors can guide businesses toward the type or types of electronic payment that might work optimally for them and their vendors.
6 <b>Internet Browsing</b>	means using a web browser. This can be with a specific purpose, such as using email or updating one's status on a social media site, or just using the web with no purpose.
7 <b>Internet Search</b>	An internet search, otherwise known as a search query, is an entry into a search engine that yields both paid and organic results. The paid results are the ads that appear at the top and the bottom of the page, and they are marked accordingly
8 <b>Smartphone</b>	a mobile phone that performs many of the functions of a computer, typically having a touchscreen interface, internet access, and an operating system capable of running downloaded applications. ( <u>Oxford Languages</u> )

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### **THE TECHNICAL EXPERT PANEL (TEP)**

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