

COMPETENCY STANDARDS

COMPUTER SECURITY INCIDENT HANDLING LEVEL II



INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
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COMPETENCY STANDARDS COMPUTER SECURITY INCIDENT HANDLING LEVEL II

Section 1 COMPUTER SECURITY INCIDENT HANDLING LEVEL II

The Computer Security Incident Handling Level II consists of competencies that a person must achieve to provide an appropriate action to an event/incident, conduct manual removal of malwares or threats, ensure efficient case management of handled event/incident and monitor volume case reporting.

This Qualification is packaged from the competency map of the Information and Communication Technology (ICT) sector as shown in Annex A.

The units of competency comprising this qualification include the following:

| Unit Code | BASIC COMPETENCIES |
|------------------|---|
| 400311210 | Participate in workplace communication |
| 400311211 | Work in a 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 |
| Unit Code | COMMON COMPETENCIES |
| ICT315202 | Apply quality standards |
| ICT311203 | Perform Computer Operations |
| Unit Code | CORE COMPETENCIES |
| ICTxxxxxx | Provide an appropriate action to prevent a possible event/incident |
| ICTxxxxxx | Conduct manual removal of malware or threats |
| ICTxxxxxx | Ensure efficient case management of handled event/incident |
| ICTxxxxxx | Monitor volume case reporting |

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

- Computer Security Incident Handler (L2)
- Computer Security Support Staff
- Computer Security Help Desk Staff

SECTION 2: COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common, and core units of competency required for Computer Security Incident Handling Level II.

BASIC COMPETENCIES

UNIT OF COMPETENCY : PARTICIPATE IN WORKPLACE COMMUNICATION

UNIT CODE : 400311210

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|--|---|--|
| 1. Obtain and convey workplace information | 1.1 Specific and relevant information is accessed from appropriate sources 1.2 Effective questioning, active listening and speaking skills are used to gather and convey information 1.3 Appropriate medium 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 storage of information are used 1.7 Personal interaction is carried out clearly and concisely | 1.1 Effective 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 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 | 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/ | 2.1 Following simple spoken instructions 2.2 Performing routine workplace duties following simple written notices 2.3 Participating in workplace meetings and discussions |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|---|---|---|
| | <p>procedures</p> <p>2.3 Feedback is given to workplace supervisor based instructions/ information received</p> <p>2.4 Workplace interactions are conducted in a courteous manner</p> <p>2.5 Where necessary, clarifications about routine workplace procedures and matters concerning conditions of employment are sought and asked from appropriate sources</p> <p>2.6 Meetings outcomes are interpreted and implemented</p> | <p>Workplace policies</p> <p>2.5 Communication procedures and systems</p> <p>2.6 Lines of communication</p> <p>2.7 Technology relevant to the enterprise and the individual's work responsibilities</p> <p>2.8 Effective questioning techniques (clarifying and probing)</p> <p>2.9 Workplace etiquette</p> | <p>2.4 Completing work-related documents</p> <p>2.5 Estimating, calculating and recording routine workplace measures</p> <p>2.6 Relating/ Responding to people of various levels in the workplace</p> <p>2.7 Gathering and providing information in response to workplace requirements</p> <p>2.8 Basic questioning/ querying</p> <p>2.9 Skills in reading for information</p> <p>2.10 Skills in locating</p> |
| 3. Complete relevant work related documents | <p>3.1 Range of forms relating to conditions of employment are completed accurately and legibly</p> <p>3.2 Workplace data is recorded on standard workplace forms and documents</p> <p>3.3 Errors in recording information on forms/ documents are identified and properly acted upon</p> <p>3.4 Reporting requirements to supervisor are completed according to organizational guidelines</p> | <p>3.1 Effective verbal and non-verbal communication</p> <p>3.2 Different modes of communication</p> <p>3.3 Workplace forms and documents</p> <p>3.4 Organizational/ Workplace policies</p> <p>3.5 Communication procedures and systems</p> <p>3.6 Technology relevant to the enterprise and the individual's work responsibilities</p> | <p>3.1 Completing work-related documents</p> <p>3.2 Applying operations of addition, subtraction, division and multiplication</p> <p>3.3 Gathering and providing information in response to workplace requirements</p> <p>3.4 Effective record keeping skills</p> |

RANGE OF VARIABLES

| VARIABLE | RANGE |
|---------------------------|---|
| 1. Appropriate sources | May include: 1.1. Team members 1.2. Suppliers 1.3. Trade personnel 1.4. Local government 1.5. Industry bodies |
| 2. Medium | May include: 2.1. Memorandum 2.2. Circular 2.3. Notice 2.4. Information discussion 2.5. Follow-up or verbal instructions 2.6. Face to face communication |
| 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, 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

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| <p>1. Critical aspects of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Prepared written communication following standard format of the organization 1.2. Accessed information using workplace communication equipment/systems 1.3. Made use of relevant terms as an aid to transfer information effectively 1.4. Conveyed information effectively adopting the formal or informal communication |
| <p>2. Resource Implications</p> | <p>The following resources should be provided:</p> <ol style="list-style-type: none"> 2.1. Fax machine 2.2. Telephone 2.3. Notebook / Writing materials 2.4. Computer with internet connection |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Demonstration with oral questioning 3.2. Interview 3.3. Written test 3.4. Third-party report |
| <p>4. Context for Assessment</p> | <ol style="list-style-type: none"> 4.1. Competency may be assessed individually in the actual workplace or through accredited institution |

UNIT OF COMPETENCY: WORK IN TEAM ENVIRONMENT

UNIT CODE : 400311211

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes to identify one’s roles and responsibilities as a member of a team.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|--|---|
| 1. Describe team role and scope | 1.1. The role and objective of the team is identified from available sources of information 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 team | 1.1. Individual role and responsibilities within the team environment are identified 1.2. Roles and objectives of the team is identified from available source of information 1.3. 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 | 2.5. Effective and appropriate forms of communications are used and interactions undertaken with team members based on company practices 2.6. Effective and appropriate contributions is made to complement team activities and objectives based on workplace context 2.7. Protocols in reporting are observed based on standard company practices 2.8. Contribute to the development of team work plans based on an understanding of team’s role and objectives | 3.1. Communication process 3.2. Workplace communication protocol 3.3. Team planning and decision making 3.4. Team thinking 3.5. Team roles 3.6. Process of team development 3.7. Workplace context | 3.1. Communicating with others, appropriately consistent with the culture of the workplace 3.2. Interacting effectively with others 3.3. Deciding as an individual and as a group using group think strategies and techniques 3.4. Contributing to Resolution of issues and concerns |

RANGE OF VARIABLES

| VARIABLE | RANGE |
|-------------------------------|---|
| 1. Role and objective of team | May include but not limited to: <ol style="list-style-type: none"> 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 but not limited to: <ol style="list-style-type: none"> 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 but not limited to: <ol style="list-style-type: none"> 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

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|-----------------------------------|---|
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate: 1.1. Worked in a team to complete workplace activity 1.2. Worked effectively with others 1.3. Conveyed information in written or oral form 1.4. Selected and used appropriate workplace language 1.5. Followed designated work plan for the job |
| 2. Resource Implications | The following resources should be provided: 2.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2. Materials relevant to the proposed activity or tasks |
| 3. Methods of Assessment | Competency in this unit may be assessed through: 3.1. Role play involving the participation of individual member to the attainment of organizational goal 3.3. Case studies and scenarios as a basis for discussion of issues and strategies in teamwork 3.4. Socio-drama and socio-metric methods 3.5. Sensitivity techniques 3.6. Written Test |
| 4. Context for Assessment | 4.1. Competency may be assessed in workplace or in a simulated workplace setting 4.2. Assessment shall be observed while task are being undertaken whether individually or in group |

UNIT OF COMPETENCY: SOLVE/ADDRESS GENERAL WORKPLACE PROBLEMS

UNIT CODE : 400311212

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</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|---|--|--|
| 1. Identify routine problems | 1.1 Routine problems or procedural problem 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, documented , ranked and presented to appropriate person 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 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 |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|------------------------------------|--|--|---|
| 3. Recommend solutions to problems | 3.1 Implementation of solutions are <i>planned</i> 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 but not limited to: 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 but not limited to: 2.1 Supervisor or manager 2.2 Peers/work colleagues 2.3 Other members of the organization |
| 3. Document | May include but not limited to: 3.1 Electronic mail 3.2 Briefing notes 3.3 Written report 3.4 Evaluation report |
| 4. Plan | May include but not limited to: 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

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|--|---|
| <p>1. Critical aspects of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Determined 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> | <p>1.1. 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> |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Case Formulation 3.2 Life Narrative Inquiry 3.3 Standardized test <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> |
| <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> |

UNIT OF COMPETENCY : DEVELOP CAREER AND LIFE DECISIONS

UNIT CODE : 400311213

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in managing one’s emotions, developing reflective practice, and boosting self-confidence and developing self-regulation.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--------------------------------|--|--|---|
| 1. Manage one’s emotion | 1.1 Self-management strategies 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 unpleasant situation 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 teachers to assist them in consolidating strengths, addressing weaknesses and fulfilling their potential are monitored 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 | 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, Conclusion, and Action plan) | 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 and being able to accept challenges |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|--|--|---|
| 3. Boost self-confidence and develop self-regulation | 3.1 Efforts for continuous self-improvement are demonstrated 3.2 Counter-productive tendencies at work are eliminated 3.3 Positive outlook in life are maintained. | 3.1 Four components of self-regulation based on Self-Regulation Theory (SRT) 3.2 Personality development concepts 3.3 Self-help concepts (e. g., 7 Habits by Stephen Covey, transactional analysis, psycho-spiritual concepts) | 3.1 Performing effective communication skills – reading, writing, conversing skills 3.2 Showing affective skills – flexibility, adaptability, etc. 3.3 Self-assessment for determining one’s strengths and weaknesses |

RANGE OF VARIABLES

| VARIABLE | RANGE |
|-------------------------------|---|
| 1. Self-management strategies | May include but not limited to: 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 but not limited to: 2.1 Job burn-out 2.2 Drug dependence 2.3 Sulking |

EVIDENCE GUIDE

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|----------------------------------|---|
| 1 Critical aspects of Competency | Assessment requires evidence that the candidate: 1.1 Express emotions appropriately 1.2 Work independently and show initiative 1.3 Consistently demonstrate self-confidence and self-discipline |
| 2 Resource Implications | The following resources should be provided: 2.1 Access to workplace and resource s 2.2 Case studies |
| 3 Methods of Assessment | Competency in this unit may be assessed through: 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 |

UNIT OF COMPETENCY : **CONTRIBUTE TO WORKPLACE INNOVATION**

UNIT CODE **:** **400311214**

UNIT DESCRIPTOR **:** This unit covers the knowledge, skills and attitudes required to make a pro-active and positive contribution to workplace innovation.

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|---|---|
| 1. Identify opportunities to do things better. | 1.1 Opportunities for improvement are identified proactively in own area of work. 1.2 Information 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 People who could provide input 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 Critical inquiry method 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. |
| 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 Reporting skills are likewise used to communicate results. | 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. | 3.1 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 |

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|----------|---|----------------------------|--|
| | 3.4 <i>Current Issues and concerns</i> on the systems, processes and procedures, as well as the need for simple innovative practices are identified. | 3.5 Basic research skills. | 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

| VARIABLES | 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 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. 5.3 Data analysis and interpretation. 5.4 Coherent writing. 5.5 Speaking. | |

EVIDENCE GUIDE

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| <p>1. Critical aspects of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 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> | <p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Pens, papers and writing implements. 2.2 Cartolina. 2.3 Manila papers. |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 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> | <ul style="list-style-type: none"> 4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions. |

UNIT OF COMPETENCY : PRESENT RELEVANT INFORMATION

UNIT CODE : 400311215

UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to present data/information appropriately.

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|-------------------------------------|---|--|---|
| 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 Organisational 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 Organisational values, ethics and codes of conduct | 1.1 Describing organisational 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 organisational 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 Data analysis techniques and procedures are documented 2.5 Recommendations are made on areas of possible improvement. | 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 conduct of evaluations 2.5 Organisational values, ethics and codes of conduct | 2.1 Computing business mathematics and statistics 2.2 Describing data analysis techniques/procedures 2.3 Reporting requirements to a range of audiences 2.4 Stating legislation, policy and procedures relating to the conduct of evaluations 2.5 Stating organisational values, ethics and codes of conduct |

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|-----------------------------------|--|--|---|
| 3. Record and present information | 3.1 Studied data/information are recorded. 3.2 Recommendations are analysed for action to ensure they are compatible with the project's scope and terms of reference. 3.3 Interim and final reports are analysed and outcomes are compared to the criteria established at the outset. 3.4 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

| VARIABLES | RANGE |
|-----------------------------|---|
| 1. Data analysis techniques | May include but not limited to: 1.1. Domain analysis 1.2. Content analysis 1.3. Comparison technique |

EVIDENCE GUIDE

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|-----------------------------------|--|
| 1. Critical aspects of Competency | <p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Determine data / information 1.2 Studied and applied gathered data/information 1.3 Recorded and studied 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>Specific resources for assessment</p> <ul style="list-style-type: none"> 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>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units. |

UNIT OF COMPETENCY : PRACTICE OCCUPATIONAL SAFETY AND HEALTH POLICIES AND PROCEDURES

UNIT CODE : 400311216

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to identify OSH compliance requirements, prepare OSH requirements for compliance, and perform tasks in accordance with relevant OSH policies and procedures

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|--|--|---|
| 1. Identify OSH compliance requirements | 1.1. Relevant OSH requirements, regulations, policies and procedures are identified in accordance with workplace policies and procedures 1.2. OSH activity non-conformities are conveyed to appropriate personnel 1.3. OSH preventive and control requirements 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 2.3. Required OSH materials, tools and equipment are arranged/ placed in accordance with OSH work standards | 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 |
| 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. Non-compliance work activities 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 3.5. 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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

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| <p>1. Critical aspects of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Convey OSH work non-conformities to appropriate personnel 1.2. Identify OSH preventive and control requirements in accordance with OSH work policies and procedures 1.3. Identify OSH work activity material, tools and equipment requirements in accordance with workplace policies and procedures 1.4. Arrange/Place required OSH materials, tools and equipment in accordance with OSH work standards 1.5. Execute work activities in accordance with OSH work standards 1.6. Report OSH activity non-compliance work activities to appropriate personnel |
| <p>2. Resource Implications</p> | <p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Facilities, materials tools and equipment necessary for the activity |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Observation/Demonstration with oral questioning 3.2 Third party report |
| <p>4. Context for Assessment</p> | <ul style="list-style-type: none"> 4.1 Competency may be assessed in the work place or in a simulated work place setting |

UNIT OF COMPETENCY : EXERCISE EFFICIENT AND EFFECTIVE SUSTAINABLE PRACTICES IN THE WORKPLACE

UNIT CODE : 400311217

UNIT DESCRIPTOR : 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

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|---|--|--|
| 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 environmental work procedures | 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 |
| 3. Convey inefficient and ineffective environmental practices | 3.1. Efficiency and effectiveness of resource utilization are reported to appropriate personnel 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. Waster 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

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

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

| ELEMENTS | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|--|---|
| 1. Apply entrepreneurial workplace best practices | 1.1. Good practices relating to workplace operations are observed and selected following workplace policy. 1.2. Quality procedures and practices are complied with according to workplace requirements. 1.3. Cost-conscious habits in resource utilization are applied based on industry standards. | 1.1. Workplace best practices, policies and criteria 1.2. Resource utilization 1.3. Ways in fostering entrepreneurial attitudes: 1.3.1. Patience 1.3.2. Honesty 1.3.3. Quality-consciousness 1.3.4. Safety-consciousness 1.3.5. Resourcefulness | 1.1. Communication skills 1.2. Complying with quality procedures |
| 2. Communicate entrepreneurial workplace best practices | 1.3. Observed good practices relating to workplace operations are communicated to appropriate person . 1.4. Observed quality procedures and practices are communicated to appropriate person 1.5. Cost-conscious habits in resource utilization are communicated based on industry standards. | 2.1. Workplace best practices, policies and criteria 2.2. Resource utilization 2.3. Ways in fostering entrepreneurial attitudes: 2.3.1. Patience 2.3.2. Honesty 2.3.3. Quality-consciousness 2.3.4. Safety-consciousness 2.3.5. Resourcefulness | 2.1. Communication skills 2.2. Complying with quality procedures 2.3. Following workplace communication protocol |
| 3. Implement cost-effective operations | 2.4. Preservation and optimization of workplace resources is implemented in accordance with enterprise policy 2.5. Judicious use of workplace tools, equipment and materials are observed according to manual and work requirements. 2.6. Constructive contributions to office operations are made according to enterprise requirements. 2.7. Ability to work within one's allotted time and finances is sustained. | 3.1. Optimization of workplace resources 3.2. 5S procedures and concepts 3.3. Criteria for cost-effectiveness 3.4. Workplace productivity 3.5. Impact of entrepreneurial mindset to workplace productivity 3.6. Ways in fostering entrepreneurial attitudes: 3.6.1. Quality-consciousness 3.6.2. Safety-consciousness | 3.1. Implementing preservation and optimizing workplace resources 3.2. Observing judicious use of workplace tools, equipment and materials 3.3. Making constructive contributions to office operations 3.4. Sustaining ability to work within allotted time and finances |

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

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|-----------------------------------|--|
| 1. Critical aspects of competency | Assessment requires evidence that the candidate: 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 | The following resources should be provided: 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 | Competency in this unit should be assessed through: 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 TITLE : **APPLY QUALITY STANDARDS**

UNIT CODE : **ELC315202**

UNIT DESCRIPTOR : This unit covers the knowledge, skills, (and) attitudes and values needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized Bold</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|---|---|---|
| 1. Assess quality of received materials or components | 1.1. Work instructions are obtained and work is carried out in accordance with standard operating procedures 1.2. Received materials or component parts are checked against workplace standards and specifications 1.3. Faulty material or components related to work are identified and isolated 1.4. Faults and any identified causes are recorded and/or reported to the supervisor concerned in accordance with workplace procedures 1.5. Faulty materials or components are replaced in accordance with workplace procedures | 1.1. Relevant production processes, materials and products 1.2. Characteristics of materials, software and hardware used in production processes 1.3. Quality checking procedures 1.4. Quality Workplace procedures 1.5. Identification of faulty materials related to work | 1.1. Reading skills required to interpret work instruction 1.2. Critical thinking 1.3. Interpreting work instructions |
| 2. Assess own work | 2.1. Documentation relative to quality within the company is identified and used 2.2. Completed work is checked against workplace standards relevant to the task undertaken 2.3. Errors are identified and isolated 2.4. Information on the quality and other indicators of production performance is recorded in accordance with workplace procedures 2.5. In cases of deviations from specified quality standards , causes are documented and | 2.1. Safety and environmental aspects of production processes 2.2. Fault identification and reporting 2.3. Workplace procedure in documenting completed work 2.4. Workplace Quality Indicators | 2.1. Carry out work in accordance with OHS policies and procedures |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized Bold</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|----------------------------------|--|--|--|
| | reported in accordance with the workplace' standards operating procedures | | |
| 3. Engage in quality improvement | 3.1. Process improvement procedures are participated in relation to workplace assignment 3.2. Work is carried out in accordance with process improvement procedures 3.3. Performance of operation or quality of product or service to ensure customer satisfaction is monitored | 3.1. Quality improvement processes 3.2. Company customers defined | 3.1. Solution providing and decision-making 3.2. Practice company process improvement procedure |

RANGE OF VARIABLES

| VARIABLE | RANGE |
|----------------------|--|
| 1. Materials | 1.1. Materials may include but not limited to: <ul style="list-style-type: none"> 1.1.1. Manuals 1.1.2. Job orders 1.1.3. Instructional videos |
| 2. Faults | 2.1. Faults may include but not limited to: <ul style="list-style-type: none"> 2.1.1. Materials not to specification 2.1.2. Materials contain incorrect/outdated information 2.1.3. Hardware defects 2.1.4. Materials that do not conform with any regulatory agencies |
| 3. Documentation | 3.1. Organization work procedures 3.2. Manufacturer's instruction manual 3.3. Customer requirements 3.4. Forms |
| 4. Errors | 4.1. Errors may be related but not limited to the following: <ul style="list-style-type: none"> 4.1.1. Deviation from the requirements of the Client 4.1.2. Deviation from the requirement of the organization |
| 5. Quality standards | 5.1. Quality standards may be related but not limited to the following: <ul style="list-style-type: none"> 5.1.1. Materials 5.1.2. Hardware 5.1.3. Final product 5.1.4. Production processes 5.1.5. Customer service |
| 6. Customer | 6.1. Co-worker 6.2. Supplier/Vendor 6.3. Client 6.4. Organization receiving the product or service |

EVIDENCE GUIDE

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|----------------------------------|---|
| 1. Critical aspect of competency | Assessment must show that the candidate: 1.1. Carried out work in accordance with the company's standard operating procedures 1.2. Performed task according to specifications 1.3. Reported defects detected in accordance with standard operating procedures 1.4. Carried out work in accordance with the process improvement procedures |
| 2. Method of assessment | 2.1. The assessor may select two (2) of the following assessment methods to objectively assess the candidate: 2.1.1. Observation 2.1.2. Questioning 2.1.3. Practical demonstration |
| 3. Resource implication | 3.1. Materials and component parts and equipment to be used in a real or simulated electronic production situation |
| 4. Context of Assessment | 4.1. Assessment may be conducted in the workplace or in a simulated environment. |

UNIT TITLE : PERFORM COMPUTER OPERATIONS

UNIT CODE : ELC311203

UNIT DESCRIPTOR : This unit covers the knowledge, skills, (and) attitudes and values needed to perform computer operations which include inputting, accessing, producing and transferring data using the appropriate hardware and software

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|---|--|
| 1. Plan and prepare for task to be undertaken | 1.1. Requirements of task are determined 1.2. Appropriate hardware and software are selected according to task assigned and required outcome 1.3. Task is planned to ensure OH&S guidelines and procedures are followed | 1.1. Main types of computers and basic features of different operating systems 1.2. Main parts of a computer 1.3. Information on hardware and software 1.4. Data security guidelines | 1.1. Reading and comprehension skills required to interpret work instruction and to interpret basic user manuals. 1.2. Communication skills to identify lines of communication, request advice, follow instructions and receive feedback. 1.3. Interpreting user manuals and security guidelines |
| 2. Input data into computer | 2.1. Data are entered into the computer using appropriate program/application in accordance with company procedures 2.2. Accuracy of information is checked and information is saved in accordance with standard operating procedures 2.3. Inputted data are stored in storage media according to requirements 2.4. Work is performed within ergonomic guidelines | 2.1. Basic ergonomics of keyboard and computer user 2.2. Storage devices and basic categories of memory 2.3. Relevant types of software | 2.1. Technology skills to use equipment safely including keyboard skills. 2.2. Entering data |
| 3. Access information using computer | 3.1. Correct program/application is selected based on job requirements 3.2. Program/application containing the information required is accessed according to company procedures 3.3. Desktop icons are correctly selected, opened and closed for navigation purposes | 3.1. General security, privacy legislation and copyright 3.2. Productivity Application 3.3. Business Application | 3.1. Accessing information 3.2. Searching and browsing files and data |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|---|--|--|
| | 3.4. Keyboard techniques are carried out in line with OH&S requirements for safe use of keyboards | | |
| 4. Produce/output data using computer system | 4.1. Entered data are processed using appropriate software commands 4.2. Data printed out as required using computer hardware/peripheral devices in accordance with standard operating procedures 4.3. Files, data are transferred between compatible systems using computer software, hardware/peripheral devices in accordance with standard operating procedures | 4.1. Computer application in printing, scanning and sending facsimile 4.2. Types and function of computer peripheral devices | 4.1. Computer data processing 4.2. Printing of data 4.3. Transferring files and data |
| 5. Maintain computer equipment and systems | 5.1. Systems for cleaning, minor <i>maintenance</i> and replacement of consumables are implemented 5.2. Procedures for ensuring security of data, including regular back-ups and virus checks are implemented in accordance with standard operating procedures 5.3. Basic file maintenance procedures are implemented in line with the standard operating procedures | 5.1. Computer equipment/system basic maintenance procedures 5.2. Viruses 5.3. OH & S principles and responsibilities 5.4. Calculating computer capacity 5.5. System Software 5.6. Basic file maintenance procedures | 5.1. Removing computer viruses from infected machines 5.2. Making backup files |

RANGE OF VARIABLES

| VARIABLE | RANGE |
|------------------------------------|--|
| 1. Hardware and peripheral devices | 1.1. Personal computers 1.2. Networked systems 1.3. Communication equipment 1.4. Printers 1.5. Scanners 1.6. Keyboard 1.7. Mouse |
| 2. Software | Software includes the following but not limited to: 2.1. Word processing packages 2.2. Data base packages 2.3. Internet 2.4. Spreadsheets |
| 3. OH & S guidelines | 3.1. OHS guidelines 3.2. Enterprise procedures |
| 4. Storage media | Storage media include the following but not limited to: 4.1. diskettes 4.2. CDs 4.3. zip disks 4.4. hard disk drives, local and remote 4.5. cloud storage |
| 5. Ergonomic guidelines | 5.1. Types of equipment used 5.2. Appropriate furniture 5.3. Seating posture 5.4. Lifting posture 5.5. Visual display unit screen brightness |
| 6. Desktop icons | Icons include the following but not limited to: 6.1. directories/folders 6.2. files 6.3. network devices 6.4. recycle bin |
| 7. Maintenance | 7.1. Creating more space in the hard disk 7.2. Reviewing programs 7.3. Deleting unwanted files 7.4. Backing up files 7.5. Checking hard drive for errors 7.6. Using up to date security solution programs 7.7. Cleaning dust from internal and external surfaces |

EVIDENCE GUIDE

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|----------------------------------|--|
| 1. Critical aspect of competency | Assessment requires evidence that the candidate: 1.1. Selected and used hardware components correctly and according to the task requirement 1.2. Identified and explain the functions of both hardware and software used, their general features and capabilities 1.3. Produced accurate and complete data in accordance with the requirements 1.4. Used appropriate devices and procedures to transfer files/data accurately 1.5. Maintained computer system |
| 2. Method of assessment | The assessor may select two of the following assessment methods to objectively assess the candidate: 2.1. Observation 2.2. Questioning 2.3. Practical demonstration |
| 3. Resource implication | The following resources should be provided: 3.1. Computer hardware with peripherals 3.2. Appropriate software |
| 4. Context of Assessment | 4.1. Assessment may be conducted in the workplace or in a simulated work environment |

CORE COMPETENCIES

UNIT TITLE : PROVIDE AN APPROPRIATE ACTION TO PREVENT A POSSIBLE EVENT/INCIDENT

UNIT CODE : ICTxxxxxx

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to provide an appropriate action to prevent a possible event/incident. This includes competencies in verifying flagged names and status of third party security solution, performing manual checking and verification and conducting case follow-up.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|---|---|
| 1. Verify flagged names | 1.1. Incident report is verified as per company Standard Operating Procedure (SOP). 1.2. Red flag detection is verified according company SOP 1.3. Ticket status is updated upon verification of detection. | 1.1. Sources of incident reports 1.2. Log and detection management 1.3. Security solution scan and operations procedure 1.4. Red flag identification | 1.1. Computer skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Basic troubleshooting skills 1.5. Interpersonal skills 1.6. Data analysis skills |
| 2. Verify status of third party security solution | 2.1. Security solution is verified if installed as per standard procedures 2.2. Security solution is verified if operational and updated as per standard procedures 2.3. Security solution is verified if it can clean or delete the issue as per standard procedures | 2.1. Log and detection management 2.2. Security solution usage and operations | 2.1. Computer skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Basic troubleshooting skills 2.5. Interpersonal skills 2.6. Data analysis skills |
| 3. Perform manual checking and verification | 3.1. Detection from the security solution is verified as per standard procedures 3.2. Action of the security solution is verified based standard procedures 3.3. Security solution updates are checked and patched as required 3.4. Security solution software is used to scan infected system/s | 3.1. Log and detection management 3.2. Security solution scan and operations procedure | 3.1. Computer skills 3.2. Communication skills 3.3. Interpreting work instructions 3.4. Basic troubleshooting skills 3.5. Interpersonal skills 3.6. Data analysis skills |
| 4. Conduct case follow-up | 4.1. Results of the scan are verified to customer/ client/ stakeholder 4.2. Security solution scan logs are checked for failed action 4.3. Failed action is escalated to appropriate authority | 4.1. Log and detection management 4.2. Security solution scan and operations procedure 4.3. Company procedures for proper escalation | 4.1. Computer skills 4.2. Communication skills 4.3. Interpreting work instructions 4.4. Basic troubleshooting skills 4.5. Interpersonal skills 4.6. Data analysis skills |

RANGE OF VARIABLES

| Variable | Range |
|-------------------------|---|
| 1 Incident report | May include: 1.1 phone call 1.2 walk-in 1.3 email 1.4 SMS 1.5 Chat 1.6 Video-conferences |
| 2 Red flag detection | May include: 2.1 ransomware 2.2 PE Infection /Virus |
| 3 Action | May include: 3.1 Failed 3.2 Clean 3.3 Delete 3.4 Quarantine |
| 4 Appropriate authority | May include: 4.1 IT department 4.2 Information security department 4.3 Security solution/security vendor |

EVIDENCE GUIDE

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|---|---|
| <p>1. Critical Aspect of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Verified flagged names <ul style="list-style-type: none"> 1.1.1. Verified incident report as per company Standard Operating Procedure (SOP). 1.1.2. Verified red flag detection according company SOP 1.2. Verified status of third party security solution <ul style="list-style-type: none"> 1.2.1. Verified security solution if it can clean or delete the issue as per standard procedures 1.3. Performed manual checking and verification <ul style="list-style-type: none"> 1.3.1. Verified detection from the security solution as per standard procedures 1.3.2. Verified action of the security solution based standard procedures 1.3.3. Checked and patched security solution updates as required 1.4. Conducted case follow-up <ul style="list-style-type: none"> 1.4.1. Checked security solution scan logs for failed action 1.4.2. Escalated failed action to appropriate authority |
| <p>2. Resource Implication</p> | <p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Appropriate supplies and materials 2.2. Applicable equipment 2.3. Appropriate software 2.4. Workplace or assessment area |
| <p>3. Method of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Demonstration with oral questioning 3.2. Written Exam 3.3. Portfolio with interview |
| <p>4. Context of Assessment</p> | <ul style="list-style-type: none"> 4.1. Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center. |

UNIT TITLE : CONDUCT MANUAL REMOVAL OF MALWARE OR THREATS

UNIT CODE : ICTxxxxxx

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required in conducting manual removal of malware or threats. This includes competencies in identifying malware or threats, completing incident documentation, determining way or action and applying solution or action in removal of malware or threats in a single or multiple computers.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|--|--|---|
| 1. Identify malware or threats | 1.1. LAN cable is disconnected and Wi-Fi is disabled including any possible network connections in the suspected or infected computer/s based on reported incident. 1.2. Microsoft (MS) process explorer and Autoruns is downloaded on a separate machine, if needed, based on procedures 1.3. MS process explorer is initialized based on best practices. 1.4. Running default processes are identified based on OS version, installed applications and device manufacturers. | 1.1. MS process explorer 1.2. MS Autoruns 1.3. Default processes 1.3.1. OS 1.3.2. Applications 1.3.3. Device manufacturers 1.4. Malware or threats identification | 1.1. Computer operation skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Probing/ investigative skills 1.5. Interpersonal skills |
| 2. Complete malware or threats incident documentation | 2.1. Date and time of initial occurrence of malware or possible threat are gathered and recorded 2.2. System behavior of malware or possible threat are recorded 2.3. Malware or possible threat file location is identified and properly logged 2.4. Possible threat file by unknown author or made is identified and properly logged 2.5. Unauthorized files are identified and properly logged. | 2.1. MS process explorer 2.2. MS Autoruns 2.3. Default processes 2.3.1. OS 2.3.2. Applications 2.3.3. Device manufacturers 2.4. Malware or threats identification 2.5. Manual Malware Elimination procedures (Windows based OS) | 2.1. Computer operation skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Interpersonal skills |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|--|--|---|
| 3. Determine appropriate way or action to remove malware or threats | 3.1. Malware samples are collected as per probing process 3.2. Normal Windows environment deletion option to be used is selected based on the identified threat. 3.3. Windows 'Safe' mode environment deletion option is selected based on the identified threat. 3.4. After submission of malware files to vendor, solution detection and clean-up is created based on results and malware submitted. | 3.1. Malware classification tree (Kaspersky) 3.1.1. worm 3.1.1.1. IM 3.1.1.2. P2P 3.1.1.3. IRC 3.1.2. virus 3.1.3. backdoor 3.1.4. Trojan 3.1.4.1. types of Trojan 3.1.5. rootkit 3.2. List of threats and risks (Symantec) 3.3. Appropriate malware or threats manual removal procedures 3.4. Threat explorer 3.5. Process explorer 3.6. registry editor 3.6.1. restoring settings to the registry 3.7. Sysinternals - Autoruns for Windows (Windows externals) | 3.1. Computer operation skills 3.2. Communication skills 3.3. Interpreting work instructions 3.4. Interpersonal skills |
| 4. Apply appropriate solution or action in removing malware or threats in multiple computers | 4.1. Removal of malware or threat file/s via GPO active directory level is consulted to the IT department as per escalation 4.2. Normal Windows environment deletion option is applied based on the identified threat. 4.3. Windows 'Safe' mode environment deletion option is applied based on the identified threat. 4.4. Recommended solution from the security solution vendor is applied based on the submitted malware or possible threat identified during the probing process | 4.1. Malware classification tree (Kaspersky) 4.1.1. worm 4.1.1.1. IM 4.1.1.2. P2P 4.1.1.3. IRC 4.1.2. virus 4.1.3. backdoor 4.1.4. Trojan 4.1.4.1. types of Trojan 4.1.5. rootkit 4.2. list of threats and risks (Symantec) | 4.1. Computer operation skills 4.2. Communication skills 4.3. Interpreting work instructions 4.4. Interpersonal skills |

RANGE OF VARIABLES

| Variable | Range |
|---------------------------|--|
| 1. installed applications | May include: 1.1. MS process explorer https://docs.microsoft.com/en-us/sysinternals/downloads/process-explorer 1.2. MS Autoruns https://docs.microsoft.com/en-us/sysinternals/downloads/autoruns |
| 2. Deletion options | May include: 2.1. Windows GUI delete command usage 2.2. Windows Command prompt delete usage |

EVIDENCE GUIDE

| | |
|---|---|
| <p>1. Critical Aspect of Competency</p> | <p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Identified malware or threats <ol style="list-style-type: none"> 1.1.1. Disconnected LAN cable and disabled Wi-Fi including any possible network connections in the suspected or infected computer/s based on reported incident 1.1.2. Initialized MS process explorer based on best practices 1.1.3. Identified running default processes based on OS version, installed applications and device manufacturers 1.2. Completed malware or threat incident documentation <ol style="list-style-type: none"> 1.2.1. Gathered and recorded date and time of initial occurrence of malware or possible threat 1.2.2. Identified and properly logged malware or possible threat file location 1.2.3. Identified and properly logged unauthorized files 1.3. Determined appropriate way or action to remove malware or threats <ol style="list-style-type: none"> 1.3.1. Collected malware samples as per probing process 1.3.2. Selected normal Windows environment deletion option to be used based on the identified threat 1.3.3. Selected Windows 'Safe' mode environment deletion option based on the identified threat 1.3.4. Created solution detection and clean-up after submission of malware files to vendor based on results and malware submitted. 1.4. Apply appropriate solution or action in removing malware or threats in multiple computers. <ol style="list-style-type: none"> 1.4.1. Consulted to the IT department the removal of malware or threat file/s via GPO active directory level as per escalation 1.4.2. Applied normal Windows environment deletion option based on the identified threat 1.4.3. Applied Windows 'Safe' mode environment deletion option based on the identified threat 1.4.4. Applied recommended solution from the security solution vendor based on the submitted malware or possible threat identified during the probing process |
| <p>2. Resource Implication</p> | <p>The following resources should be provided:</p> <ol style="list-style-type: none"> 2.1. Appropriate supplies and materials 2.2. Applicable equipment 2.3. Appropriate software 2.4. Workplace or assessment area |
| <p>3. Method of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Demonstration with oral questioning 3.2. Written Exam 3.3. Portfolio with interview |
| <p>4. Context of Assessment</p> | <p>4.1. Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p> |

UNIT TITLE : ENSURE EFFICIENT CASE MANAGEMENT OF HANDLED EVENT/INCIDENT

UNIT CODE : ICTxxxxxx

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to ensure efficient case management of handled event/incident. This includes competencies in getting data from reporting/ticketing system and collecting number of failed detection.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|---|---|---|---|
| 1. Get data from the reporting/ticketing system | 1.1. Initial document is checked for discrepancies based on the identified malware or possible threat description. 1.2. Threat timeline table is created based on the initial and current occurrence of malware. 1.3. Initial actions done are checked to address the case submitted by the stakeholders. | 1.1. Ticket management systems 1.1.1. Spreadsheet 1.1.2. manual/logbook 1.2. Ticket document discrepancies 1.2.1. malware naming 1.2.2. timeline reporting 1.2.3. system behavior 1.2.4. system information 1.3. Creating timelines | 1.1. Computer operation skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Basic troubleshooting skills 1.5. Interpersonal skills 1.6. Data analysis skills |
| 2. Collect number of failed detection | 2.1. Behavior of the malware or possible threats is identified based on the ticket 2.2. Condition of the security solution product is identified in addressing the threats based on the ticket 2.3. Number of machines with failed detection are identified based on the ticket 2.4. Number of users in the organization with failed detection are identified based on the ticket 2.5. Correlation of the failed detection versus the timeline and the number of machines with the threat is determined based on the strength of the malware or threat | 2.1. malware or possible threats activity and behavior 2.2. conditions of security solution products | 2.1. Computer operation skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Basic troubleshooting skills 2.5. Interpersonal skills 2.6. Data analysis skills |

RANGE OF VARIABLES

| Variable | Range |
|------------------|--|
| 1. discrepancies | May include: 1.1. malware naming 1.2. timeline reporting 1.3. system behavior 1.4. system information |
| 2. condition | May include: 2.1. product not updated 2.2. product misconfiguration 2.3. product is infected by the threat 2.4. product is corrupted |

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. Get data from the reporting/ ticketing system <ol style="list-style-type: none"> 1.1.1. Checked initial document for discrepancies based on the identified malware or possible threat description 1.1.2. Created threat timeline table based on the initial and current occurrence of malware 1.2. Collect number of failed detection <ol style="list-style-type: none"> 1.2.1. Identified number of machines with failed detection based on the ticket 1.2.2. Identified number of users in the organization with failed detection based on the ticket 1.2.3. Determined correlation of the failed detection versus the timeline and the number of machines with the threat based on the strength of the malware or threat |
| <p>2. Resource Implications</p> | <p>The following resources should be provided:</p> <ol style="list-style-type: none"> 2.1. Appropriate supplies and materials 2.2. Applicable equipment 2.3. Appropriate software 2.4. Workplace or assessment area |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Demonstration with oral questioning 3.2. Written Exam 3.3. Portfolio with interview |
| <p>4. Context of Assessment</p> | <p>4.1. Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p> |

UNIT TITLE : MONITOR VOLUME CASE REPORTING

UNIT CODE : ICTxxxxxx

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to monitor volume case reporting. This includes competencies in pilot trending the malware activity for machine, infected department for people, malware for source/vector and timeline.

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|---|---|--|
| 1. Plot trending malware activity for machine | 1.1. Number of infected machines are logged and plotted based on security solution report 1.2. OS version of the infected machines are logged and plotted based on security solution report 1.3. Productivity software are identified and plotted based on IT department reports on authorized and unauthorized software | 1.1. Operating systems (MS Windows) 1.2. Productivity software 1.2.1. Word processing 1.2.2. Spreadsheet application 1.2.3. Presentation software 1.3. Knowledge with Process Explorer and Autoruns 1.4. Security solution scan and operations procedure 1.5. Security solution management application | 1.1. Computer operation skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Interpersonal skills 1.5. Monitoring skills 1.6. Summarizing and visualizing data |
| 2. Plot trending infected department or people | 2.1. Number of departments with the highest number of infected machines is logged and plotted based on security solution report 2.2. Number of employee accounts infected is logged and plotted based on security solution report | 2.1. Operating systems (MS Windows) 2.2. Productivity software 2.2.1. Word processing 2.2.2. Spreadsheet application 2.2.3. Presentation software 2.3. Knowledge with Process Explorer and Autoruns 2.4. Security solution scan and operations procedure 2.5. Security solution management application | 2.1. Computer operation skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Interpersonal skills 2.5. Monitoring skills 2.6. Summarizing and visualizing data |
| 3. Plot trending malware for source/vector | 3.1. Number of detection identified with the used of external storage devices are logged and plotted based on security solution report | 3.1. Operating systems (MS Windows) 3.2. Productivity software 3.2.1. Word processing 3.2.2. Spreadsheet | 3.1. Computer operation skills 3.2. Communication skills 3.3. Interpreting work instructions 3.4. Interpersonal |

| ELEMENT | PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables | REQUIRED KNOWLEDGE | REQUIRED SKILLS |
|--|---|--|---|
| | <p>3.2. Number of detection identified with the used of email and chat applications are logged and plotted based on security solution report</p> <p>3.3. Number of detection identified with the used of downloads (pirated software) are logged and plotted based on security solution report</p> <p>3.4. Number of detection identified with the used of internet browsing are logged and plotted based on security solution report</p> | <p>application</p> <p>3.2.3. Presentation software</p> <p>3.3. Knowledge with Process Explorer and Autoruns</p> <p>3.4. Security solution scan and operations procedure</p> <p>3.5. Security solution management application</p> | <p>skills</p> <p>3.5. Monitoring skills</p> <p>3.6. Summarizing and visualizing data</p> |
| <p>3. Plot trending malware for timeline</p> | <p>3.1. Number of trending malware are plotted based on schedules</p> <p>3.2. Correlation of detection with reference to time on source, time on group and time on machine is plotted based on security solution product log.</p> | <p>4.1. Operating systems (MS Windows)</p> <p>4.2. Productivity software</p> <p>4.2.1. Word processing</p> <p>4.2.2. Spreadsheet application</p> <p>4.2.3. Presentation software</p> <p>4.3. Knowledge with Process Explorer and Autoruns</p> <p>4.4. Security solution scan and operations procedure</p> <p>4.5. Security solution management application</p> | <p>4.1. Computer operation skills</p> <p>4.2. Communication skills</p> <p>4.3. Interpreting work instructions</p> <p>4.4. Interpersonal skills</p> <p>4.5. Monitoring skills</p> <p>4.6. Summarizing and visualizing data</p> |

RANGE OF VARIABLES

| Variable | Range |
|--------------------------|---|
| 1. productivity software | May include: 1.1. Word processing 1.2. Spreadsheet 1.3. Presentation software |
| 2. schedules | May include: 2.1. active detection 2.2. hourly 2.3. daily 2.4. weekly 2.5. monthly |

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. Plotted trending malware activity for machine <ul style="list-style-type: none"> 1.1.1. Logged and plotted number of infected machines based on security solution report 1.1.2. Logged and plotted OS version of the infected machines based on security solution report 1.1.3. Identified and plotted productivity software based on IT department reports on authorized and unauthorized software 1.2. Plotted trending infected department or people <ul style="list-style-type: none"> 1.2.1. Logged and plotted number of departments with the highest number of infected machines based on security solution report 1.2.2. Logged and plotted number of employee accounts infected based on security solution report 1.3. Plotted trending malware for source/vector <ul style="list-style-type: none"> 1.3.1. Logged and plotted number of detection identified with the used of external storage devices based on security solution report 1.3.2. Logged and plotted number of detection identified with the used of email and chat applications based on security solution report 1.3.3. Logged and plotted number of detection identified with the used of downloads (pirated software) based on security solution report 1.3.4. Logged and plotted number of detection identified with the used of internet browsing based on security solution report 1.4. Plotted trending malware for timeline <ul style="list-style-type: none"> 1.4.1. Plotted number of trending malware based on schedules 1.4.2. Plotted correlation of detection with reference to time on source, time on group and time on machine based on security solution product log |
| <p>2. Resource Implications</p> | <p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Appropriate supplies and materials 2.2. Applicable equipment 2.3. Appropriate software 2.4. Workplace or assessment area |
| <p>3. Methods of Assessment</p> | <p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Demonstration with oral questioning 3.2. Written Exam 3.3. Portfolio with interview |
| <p>4. Context of assessment</p> | <p>4.1. Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p> |

SECTION 3 TRAINEE ENTRY REQUIREMENTS, TRAINER'S QUALIFICATIONS, LIST OF TOOLS, MATERIALS AND EQUIPMENT; AND TRAINING FACILITIES

3.1 TRAINEE ENTRY REQUIREMENTS

The trainees who wish to enter the course should possess the following requirements:

- Must have completed at least 10 yrs. basic education or its equivalent as per existing DepEd policies and regulations
- Must have a training certificate on Computer Security Incident Handling Level I or must have at least 1 yr. experience in computer incident handling or similar job function
- With skill functions which will be validated by a **qualifying exam** to be administered by the training institution
- Has the capacity to communicate in both oral and written forms.
- Physically able to operate/manipulate a computer input devices

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

3.2 TRAINERS QUALIFICATIONS

- Must be a holder of Trainer's Methodology Certificate (TMC) **OR** must have training of trainer's certificate **OR** must be a practicing trainer for two (2) years within the last five (5) years;
- Must have at least 3-years relevant industry experience as cyber security practitioner or computer security support personnel for the past 5-years;

3.3 LIST OF TOOLS, EQUIPMENT AND MATERIALS

Recommended list of tools, equipment and materials for the conduct of training in Computer Security Incident Handling Level II (minimum *class size of 20 students/trainees*):

| TOOLS | | |
|-------|-------|--|
| Qty. | Unit | Description/Specification |
| 21 | units | Enterprise or Corporate level Security solution Applications (<i>at least 5 different security solution software installed per PC using the license for Academic or Educational purposes; preferably company software as listed under ROV of the Core units of competency</i>) |
| 21 | units | Learning Management System (Educational /Academic Subscription/License) |
| 21 | units | *Virtualization Applications (e.g Microsoft, VMware, Oracle) |
| 21 | units | *Office Productivity Tools (offline or online) |
| 1 | unit | Internet access, 10Mbps or higher (per class of 20 students/trainees) |
| 1 | pc | 3 TB External hard drive or higher |
| 1 | unit | Router, LAN or WiFi |
| 1 | unit | Switch, 32 ports or higher |
| 3 | pcs | White board eraser, magnetic |
| 3 | boxes | White board marker, assorted colors |

* Can be either educational, license or open-source software

| EQUIPMENT | | |
|-----------|-------|--|
| Qty. | Unit | Description/Specification |
| 21 | units | Desktop computer, (software dependent specifications) with mouse and keyboard Processor : i7 8 th Gen Core Processor or its equivalent and/or higher version Memory : 8GB DDR4 or higher Storage : 1TB 3.5-inch 7200 RPM Graphics : Integrated HD Graphics or external VGA card Accessories : Mouse and Keyboard Operating System : Win 10 Pro 64 Bit |
| 21 | units | Monitor, 24" Flat, 1920x1060, 60Hz Refresh Rate, PLS Panel, USB-Cx2, DP, HDMI, VGA Wall (Versa) mountable monitor |
| 1 | unit | LCD Projector and projector screen |
| 1 | unit | Printer |
| 1 | unit | White board and / or glass board |
| 21 | sets | Ergonomic computer tables and chairs |

| MATERIALS | | |
|-----------|------|---|
| Qty. | Unit | Description/Specification |
| 21 | pcs | Hand-outs / Learning materials manual (full-course) |
| 1 | pc | Video learning materials (offline & online) |
| 21 | pcs | Practice sets / materials (offline & online) |
| When | pcs | Reference books/materials (offline & online) |

| MATERIALS | | |
|------------------|----------------------------------|---|
| Qty. | Unit | Description/Specification |
| needed | | Online Reference Subscription is a plus |
| 5 | reams (per training duration) | Bond/Copy paper, A4 |

Due to the fast-changing nature of the Information and Communications Technology (ICT) sector, TVET providers are reminded to use and provide their trainees with the latest technology tools, equipment and materials where appropriate and applicable.

Up-to-date tools, equipment and materials of equivalent functions can be used as alternatives. This also applies in consideration of community practices and their availability in the local market.

3.4 TRAINING FACILITIES

Based on class size of 20 students/trainees the space requirements for the teaching/learning and circulation areas are as follows:

| TEACHING/LEARNING AREAS | SIZE IN METERS | AREA IN SQ. METERS | QTY | TOTAL AREA IN SQ. METERS |
|--|-----------------------|---------------------------|------------|---------------------------------|
| Computer/ Laboratory/ Lecture Area | 6 x 8 | 48 | 1 | 48 |
| Learning Resource Area | 3 x 5 | 15 | 1 | 15 |
| Wash & Toilet Area | 2 x 2 | 4 | 2 | 8 |
| Total | | | | 71 |
| Facilities / Equipment / Circulation** | | | | 35.5 |
| Total Area | | | | 106.5 |

**** Area requirement is equivalent to 30% of the total teaching/learning areas**

Appropriate consideration should be given in providing and allocating workspace, communications facilities, and the usual workplace amenities to ensure a proper learning environment. Where applicable, training shall be held or conducted in learning facilities in accordance with generally accepted industry standards and practice.

ACKNOWLEDGEMENTS

The Technical Education and Skills Development Authority (TESDA) wishes to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development and validation of these Training Regulations.

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