NVQ Occupational Standard for Personal Computer Repairs
ACKNOWLEDGEMENT

The Grenada National Training Agency would like to thank the following persons for their contribution in vetting this document.

**Members of the Personal Computer Repairs Level 2 lead body.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Chad Fraser</td>
<td>Royal Grenada Police Force, Software Developer</td>
</tr>
<tr>
<td>Kester Charles</td>
<td>Assistant Information Technology Officer, Her Majesty’s Prisons</td>
</tr>
<tr>
<td>Clevon J. Noel</td>
<td>Information Technology officer, Grenada Hotel and Tourism Association</td>
</tr>
<tr>
<td>Rackelle Forsythe</td>
<td>Information Technology instructor, Kool Business Center</td>
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<tr>
<td>Michael Millette</td>
<td>Ministry of Education, Information Management Officer</td>
</tr>
<tr>
<td>Yusuf Benn</td>
<td>Computer Technician, Kool System</td>
</tr>
<tr>
<td>Orlando Romain</td>
<td>Information Technology Officer, Board of Tourism</td>
</tr>
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INTRODUCTION

The Grenada National Training Agency (GNTA) as empowered by the GCTVET Act of 2009 is the agency mandated to co-ordinate, facilitate and enable the development and growth of Technical and Vocational Education and Training in Grenada Carriacou and Petite Martinique.

The Agency through modes of training intervention intends to help in ensuring that there exists a supply of trained and skilled workers to service labour market needs and thereby contribute to higher levels of productivity in the Grenadian economy. The organisation by way of policy seeks to have developed and approved occupational standards derived from industry specifications and to guide the training, assessment and certification within the Grenada TVET System.

The Grenada Council for Technical Vocational Education and Training (GCTVET) created by an ACT of parliament in 2009 is empowered to approve standards for the award certification leading to CVQ’s and NVQ’s.

The GNTA has established industry lead groups responsible for vetting standards as well as specifying and recommending standards to be approved.

ABOUT THIS STANDARD

This is a National Vocational Qualification (NVQ) that has been approved for training and certification in Grenada.

This standard was adapted and approved by the Grenada Council for Technical Vocational Education and Training (GCTVET) on 6th May, 2014.

There are some minor modifications made to accommodate the local context; however the overall content of the document is unchanged.
QUALIFICATION OVERVIEW

The NVQ Level 2 in Personal Computer Repairs is for individuals whose role requires well developed behavioural competencies but whose scope for independent decision making and for bringing about change is unlimited. Persons who achieve this qualification can function independently.

They are likely to be in roles where they are required to:

- diagnose technical problems with personal computer system components
- resolve faults with personal computer system components
- dismantle and assemble personal computer
- test hardware
- modify personal computer systems
- install software

Normally persons working at Level 2 should be able to competently carry out simple, complex and routine work activities. There maybe general as well as specific legislation and statute relating to the area of work. Candidates will be expected to understand how the legislation impacts on the organization together with any organization’s regulations and be able to interpret and advise their colleagues and other users of its importance. This qualification covers competencies by providing services as indicated in the competency standard

Relevant occupations include:

- Computer Programmers
- Computer System Analysts
- Computer Hardware Engineers
- Computer Support Specialists
To achieve this qualifications all core units must be achieved plus a minimum of two Level 1 electives, three Level 2 electives and one Level 3 elective must be completed. The nominal training hours are a guide for planning the delivery of training programmes.

Please note that certification can be gained through formal training or on-the-job experience by scheduling assessments with the Grenada National Training Agency (GNTA) Certified Assessors.
## Packaging of Competency Standards for Vocational Qualifications

### ITPC2001  
**NVQ Level 2 – Personal Computer Repair**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Unit Title</th>
<th>Mandatory/Elective</th>
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<tbody>
<tr>
<td>IT00101</td>
<td>Diagnose Technical Problems With Personal Computer Systems Components</td>
<td>Mandatory</td>
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<tr>
<td>IT00102</td>
<td>Resolve Faults With Personal Computer System Components</td>
<td>Mandatory</td>
</tr>
<tr>
<td>IT00103</td>
<td>Dismantle And Assemble Personal Computer</td>
<td>Mandatory</td>
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<tr>
<td>IT00104</td>
<td>Test Hardware</td>
<td>Mandatory</td>
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<tr>
<td>IT00105</td>
<td>Modify Personal Computer Systems</td>
<td>Mandatory</td>
</tr>
<tr>
<td>IT00152</td>
<td>Install Software</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>
**IT00101: Diagnose Technical Problems with Personal Computer Systems Components**

**Unit Descriptor:**
This unit deals with the skills and knowledge required to troubleshoot, locate and determine causes of faults in electronic systems.

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<tr>
<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
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<tbody>
<tr>
<td>1</td>
<td>Gather information to identify technical problems</td>
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<tr>
<td>2</td>
<td>Analyse information to determine potential solutions</td>
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</table>
### RANGE STATEMENT

**Clarify the nature** includes:
- Troubleshooting /isolation/ problem determination procedures
- Determining whether a hardware or software problem
- Gathering information from user

**Technical problem** includes:
- I/O ports and cables
- Motherboards
- Peripherals
- Computer case
- Storage device and cables
- Cooling systems
- Processor/CPU
- Memory
- Display device
- Input device
- Adapters
- Portable systems
- Error messages and codes
- Communication technologies (AR)

**Technical information** includes:
- Technical specifications
- Fault history
- Measurements
- System performance

**Diagnostic information** includes:
- Problem description
- Problem history
- Problem location
- Product specifications
- Time and expense records
- Any parts used
- Actions taken and outcome

**Diagnostic methods** include:
- Substitution
- Replication
- Testing
- Environment change
- Use of diagnostic tools hardware/software (AR)

### UNDERPINNING KNOWLEDGE

1. What are the types of technical problem that could occur
2. What is the impact of different technical problems on the customer
3. What are the diagnostic procedures to be followed
4. What are the diagnostic methods or tools to be used
5. What type of information is required to resolve different types of technical problem
6. How to gather information
7. What are the purposes for which diagnostic information is required
8. What is the technical information on a specified range of products
9. What procedures should be used to validate technical problems
10. How to match symptoms of technical problems to their potential causes
11. What are the potential causes of different technical problems
12. How to analyse information and identify solutions
13. What are the types of solution that are applied
14. What factors could affect the success of the solution
15. What types of difficulty could occur
16. What are the escalation procedures for difficulties
17. How to minimise service disruption during diagnostics
18. What information should be documented
19. What are the procedures for documentation
20. What are the relevant requirements and service level agreements and why it is important to comply with them
21. What is the level of service needed, your individual responsibility and authority
22. What are the budgetary requirements of ‘possible’ solutions (AR)

**EVIDENCE GUIDE**

(1) **Critical Aspects of Evidence**
Competency must be demonstrated in the ability to perform consistently at the required standards.
In particular, assessors should look to see that the candidate:
- Demonstrate knowledge of the operations of electronic systems and their components, common faults and diagnostic/fault finding procedures
- Identify and verify error indicators and faults symptoms
- Determine work requirements and plan and organise work to fulfill such requirements
- Determine, select and use resources to complete tasks to specifications
- Apply fault finding/diagnostic/troubleshooting procedures to accurately locate faults
- Determine cause of faults through systematic elimination of probable sources and assessment of data and evidence
- Source, interpret and apply technical information to work activities

(2) **Method of Assessment**
Assessors should gather a range of evidence, over a period time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer’s specifications, codes, standards, manuals and reference materials.

(3) **Context of Assessment**
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually.
IT00102: Resolve Faults with Personal Computer System Components

Unit Descriptor: This unit deals with the skills and knowledge required to locate, identify and rectify faults in computers.

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Identify and select suitable fault remedies</td>
<td>1.1 Identify suitable remedies from known remedies or specified alternatives</td>
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<td>1.2 Determine the applicability of fault remedies</td>
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<td>1.3 Select the most appropriate remedy in view of considerations</td>
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<td>1.4 Comply with all relevant regulatory, licensing, warranty, contractual, confidentiality, and health and safety requirements</td>
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<tr>
<td>2 Prepare to apply remedy for Personal Computer system components</td>
<td>2.1 Check if the selected remedy is still required and applicable</td>
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<td>2.2 Identify the procedure for the remedy</td>
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<td>2.3 Verify that the remedial maintenance procedure is capable of being delivered</td>
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<td>2.4 Select and obtain the required materials and equipment that are available</td>
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<td>2.5 Comply with all relevant regulatory, licensing, contractual, confidentiality, and health and safety requirements</td>
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<td>2.6 Ensure that the selected remedy has been co-ordinated with customer</td>
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<tr>
<td>3 Apply fault remedy to Personal Computer system components</td>
<td>3.1 Use methods and materials that are suitable according to the specified fault remedy</td>
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<td>3.2 Apply the remedy to the faulty personal computer system component</td>
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<td>3.3 Apply the remedy within the agreed timeframe</td>
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<td>3.4 Check that the fault has been resolved</td>
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<td>3.5 Report any unexpected variations in performance of the personal computer system to the appropriate persons</td>
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</tbody>
</table>
3.6 Document the remedy applied and any hardware used following organisation procedure

3.7 Comply with all relevant regulatory, licensing, contractual, confidentiality, and health and safety requirements

**RANGE STATEMENT**

**Considerations** include:
- Business or service impact
- Resource and skill availability
- Ease of implementation.

**UNDERPINNING KNOWLEDGE**

1. How to determine the applicability of specified fault remedies
2. What are the relevant considerations when selecting fault remedies
3. What are the specified parts of organisational policy for fault rectification
4. What are the sources of information on failures and remedies
5. How to access these sources
6. How to prioritise different fault remedies for problems with Personal Computer system components
7. What are the remedies for different types of problems with Personal Computer system components
8. How to apply different remedy procedures
9. What are the appropriate ergonomics
10. How to confirm a failure in a Personal Computer system components
11. Who can confirm the status of the failure
12. What factors might have changed
13. What technical restrictions apply to applying remedies to specific components
14. What are the procedures to follow where the fault remedy cannot be applied to a component
15. How to identify the materials, equipment, and time required for a remedy procedure
16. How to organise the availability of materials and equipment
17. What are the procedures to follow when materials or equipment are unavailable
18. How to check that the remedy procedure has worked
19. What constitutes unexpected variations and who should be informed of them
20. What are the systems for recording the application of remedy procedures and hardware logs
21. Why it is important to use the information systems
22. What are the relevant requirements
23. Why it is important to comply with them
24. How to obtain information on them.

EVIDENCE GUIDE

(1) Critical Aspects of Evidence
Competency must be demonstrated in the ability to perform consistently at the required standards.
In particular, assessors should look to see that the candidate:
- Demonstrate knowledge of the operations of computer systems and their components, common faults and solutions and diagnostic/fault finding procedures
- Identify and verify error indicators and faults symptoms
- Determine work requirements and plan and organise work to fulfill such requirements
- Determine, select and use resources to complete tasks to specifications
- Apply fault finding/diagnostic/troubleshooting procedures to accurately locate faults
- Determine cause of faults through systematic elimination of probable sources and assessment of data and evidence
- Provide effective solution to computer faults and operationalise computer system
- Source, interpret and apply technical information to work activities
- Complete essential post activity housekeeping
- Communicate effectively with others in associated areas
- Apply relevant occupational health and safety requirements and enterprise policies and procedures
- Perform all task in accordance with standard operating procedures and quality requirements

(2) Method of Assessment
Assessors should gather a range of evidence, over a period time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer’s specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually.
IT00103: Dismantle and Assemble Personal Computer

Unit Descriptor: This unit identifies the competence required to disassemble and assemble components of the system as a part of a maintenance procedure.

<table>
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<tr>
<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
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<tbody>
<tr>
<td>1</td>
<td>Dismantle personal computer</td>
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<td>Assemble personal computer</td>
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</table>
2.7 Comply with all relevant regulatory, licensing, contractual, warranty, confidentiality, and health and safety requirements

2.8 Complete all documentation according to organisational procedures

## RANGE STATEMENT

**Components** include:
- Motherboard
- Storage device
- Power supply
- Cooling system
- Processor/CPU
- Memory
- Display device
- Input device
- Adapters

**Configure the Components** includes:
- Legacy devices (eg ISA sound card)
- Specialised devices (eg CAD/CAM)
- Internal modem
- Floppy drive controllers
- Hard Drive controllers
- Multimedia devices
- NICs
- I/O ports

## UNDERPINNING KNOWLEDGE

1. What types of material and equipment should be protected
2. What are the dismantling processes
3. What components are required for different types of hardware
4. What are the assembly processes for different types of hardware
5. How should components be connected
6. What types of problem could occur
7. What actions could be taken for different types of problem
8. What are the escalation procedures for problems
9. How to assess the usability of different components
10. What types of component can be reused
11. How to protect different types of component
12. How to use shipping restraints
13. How to keep track of different components
14. Where should components be stored
15. How to prepare personal computer for transportation, storage or disposal
16. Why is it important to dispose of hardware in an appropriate fashion
17. What are the manufacturers specifications
18. What are the organisation’s policies and procedures relating to the assembly of hardware
19. What are the test procedures that need to be performed
20. What are the relevant requirements
21. Why it is important to comply with them
22. How to obtain information on them

EVIDENCE GUIDE

(1) Critical Aspects of Evidence
Competency must be demonstrated in the ability to perform consistently at the required standards. In particular, assessors should look to see that the candidate:
• Demonstrate knowledge of electronic components and recommended assembling/disassembling procedures
• Adopt and carry out correct procedures prior to undertaking task
• Demonstrate safe and effective operational use of tools and equipment
• Demonstrate the ability to assemble/disassemble electronic components
• Plan work activities and work efficiently to minimize disruptions
• Apply isolation/shut down procedures
• Give particular attention to safety and elimination of hazards
• Demonstrate safe handling/storage of material/supplies/equipment
• Interactively communicate with others to ensure safe operations
• Demonstrate compliance with all standards, statutory regulations and organizational policies and procedures including quality requirements
• Compliance with reporting and documentation requirements

(2) Method of Assessment
Assessors should gather a range of evidence, over a period time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer’s specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually.
**Test Hardware**

**Unit Descriptor:**

This unit deals with the skills and knowledge required to identify, select and use diagnostic utilities and tools.

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<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
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<tbody>
<tr>
<td>1</td>
<td>Select test procedures for hardware</td>
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<td>2</td>
<td>Apply test procedures to hardware</td>
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<tr>
<td>3</td>
<td>Collect and record data from tests</td>
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**RANGE STATEMENT**
Hardware includes:
- Components
- Personal Computer

UNDERPINNING KNOWLEDGE

1. What are the different purposes of tests
2. What type of data can be obtained from them
3. What types of factor might affect the choice of test procedure
4. What are the resources that are available
5. Who can provide the resources
6. How to establish the data requirements of a test
7. What are the tests, methods, techniques and testing platforms that are available
8. How to choose the most effective test procedure
9. What are the advantages and disadvantages of different test procedures
10. What are the preparation processes that should be used for different test procedures
11. How to apply the selected test procedure
12. How to utilise testing platforms
13. How to operate different tests, test equipment, and testing platforms
14. What are the required performance parameters and operational requirements
15. How to ensure the data accords with the requirements of the test procedure
16. Why it is important to collect the data correctly
17. How to ensure there is enough data
18. What types of problem could occur
19. What actions could be taken for different types of problem
20. What are the escalation procedures for problems
21. What are the systems for recording test results
22. Why it is important to use the information systems
23. What are the relevant requirements
24. Why it is important to comply with them
25. How to obtain information on them.
EVIDENCE GUIDE

(1) Critical Aspects of Evidence
Competency must be demonstrated in the ability to perform consistently at the required standards.
In particular, assessors should look to see that the candidate:
• Demonstrate knowledge of the types, functions and application of diagnostic utilities and tools
• Assess and determine characteristics of diagnostic tools and utilities
• Access, read and interpret technical information and apply knowledge to work activities
• Recognize fault symptoms and error alerts and determine possible causes
• Accurate interpretation of work instructions and verification of nature of faults
• Prepare test environment and schedule and execute tests using appropriate testing methodologies
• Select and set appropriate performance benchmarks in accordance with system specifications
• Select and use appropriate diagnostic tools and utilities in accordance with work requirements
• Accurate recording and documentation of observation and test results
• Conduct all activities in accordance standard operating procedures, industry standards and manufacturer’s specifications
• Compliance with occupational health and safety requirements and enterprise policies and procedures

(2) Method of Assessment
Assessors should gather a range of evidence, over a period time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer’s specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually.
IT00105: Modify Personal Computer Systems

Unit Descriptor: This unit deals with the skills and knowledge required to plan, prepare and undertake upgrading of computer systems and associated peripheral devices.

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<th>ELEMENTS</th>
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<tbody>
<tr>
<td>1</td>
<td>Carry out modifications to Personal Computer systems</td>
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<tr>
<td>1.1</td>
<td>Confirm that the modifications are <strong>suitable for the system</strong></td>
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<td>1.2</td>
<td>Use methods and equipment that are suitable and correspond to contractual commitments</td>
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<tr>
<td>1.3</td>
<td>Carry out the modifications according to the specified procedures</td>
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<tr>
<td>1.4</td>
<td>Carry out the modifications using the specified resources within the agreed timeframe</td>
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<tr>
<td>1.5</td>
<td>Identify any problems with the modification process and take appropriate action</td>
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<tr>
<td>1.6</td>
<td>Report any unexpected variations in performance or outcomes to the appropriate people</td>
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<tr>
<td>1.7</td>
<td>Test the modified system using the selected test procedures</td>
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<tr>
<td>1.8</td>
<td>Comply with all relevant regulatory, licensing, contractual, warranty, confidentiality, and health and safety requirements</td>
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<tr>
<td>1.9</td>
<td>Complete all documentation according to organisational procedures</td>
</tr>
</tbody>
</table>

| 2        | Restore Personal computer systems after modifications |
| 2.1      | Restore the system to operation meeting the requirements of the customer following specified procedures |
| 2.2      | Dispose components and materials that are no longer required |
| 2.3      | Inform the relevant people that the modifications have been made |
| 2.4      | Record and communicate the modifications by using the appropriate information systems |
| 2.5      | Comply with all relevant regulatory, licensing, contractual, confidentiality, and health and safety requirements |
RANGE STATEMENT

Suitable for the system includes:
- Drivers for legacy devices
- Bus types and characteristic
- Cache in relationship to motherboards
- Memory capacity, characteristics and compatibility
- Processor speed and compatibility
- Hard drive capacity and characteristics
- System/firmware limitations
- Power supply output capacity

UNDERPINNING KNOWLEDGE

1. How to check the suitability of the modifications
2. What are the methods and equipment that could be used
3. What are the specified procedures for undertaking modifications
4. What resources are specified
5. What are the relevant specifications and requirements
6. How to source information on the procedures and any other relevant information
7. What time scale is provided for the implementation of modifications
8. What types of problem could occur
9. What actions could be taken for different types of problem
10. What are the escalation procedures for problems
11. What constitutes unexpected variations or outcomes
12. What are the proper ergonomics
13. What is the warranty information
14. What are the preparations that should be used for different test procedures
15. Why it is important to operate the system correctly
16. What are the selected test procedures
17. Why it is important to collect all the required data
18. What constitutes unexpected variations or outcomes
19. Who should be informed of unexpected variations or outcomes
20. What are the specified procedures for returning systems to operation
21. What are the customer's requirements
22. What are the alternative solutions, if any and how to inform customer of them
23. Why it is important to restore systems according to the requirements of customers
24. How to test for integrity
25. Which components and materials should be removed
26. How to remove them
27. How components and materials should be disposed
28. Who should be informed about the modifications
29. What are the systems for recording and communicating modifications
30. What information should be recorded
31. What are the relevant regulatory, licensing, contractual, confidentiality, and health and safety requirements and why it is important to comply with them
32. How to obtain information on them

EVIDENCE GUIDE

(1) Critical Aspects of Evidence
Competency must be demonstrated in the ability to perform consistently at the required standards.
In particular, assessors should look to see that the candidate:
- Demonstrate knowledge of types of computer system and peripheral devices including their features and capabilities, installation and testing procedures
- Interpret technical documentation, work instructions and procedures
- Organise and prepare for work including selection of appropriate resources
- Select methods and techniques appropriate to the circumstances
- Install upgrade to computer system and peripheral devices to manufacturer/component supplier requirements
- Determine upgrade requirements and prepare appropriate plan
- Test upgrades in accordance with manufacturer’s specifications
- Perform maintenance activities and implement preventative maintenance plan
- Communicate effectively with others involved in or affected by the work
- Complete workplace and equipment documents
- Perform all activities in accordance with standard operating procedures, manufacturer’s specifications and enterprise policies and procedures
- Compliance with occupational health and safety requirements, quality requirements and industry standards

(2) Method of Assessment
Assessors should gather a range of evidence, over a period time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer’s specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually.
IT00152: Install Software

Unit Descriptor: This unit deals with the skills and knowledge required to install software applications under instructions and applies to individuals operating in the information and communication industry.

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<td>1 Prepare for the Installation of Software</td>
<td>1.1 Preserve the integrity of the system prior to installation</td>
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<td>1.2 Deal with any inadequate arrangements promptly and effectively</td>
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<td>1.3 Identify the current configuration of the system accurately prior to installation.</td>
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<td>1.4 Ensure that the given software is compatible with the existing system configuration.</td>
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<td>1.5 Resolve promptly and effectively any incompatibility between the existing system configuration and the given software</td>
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<td>1.8 Ensure that your work schedules accurately set out the sequence in which the given software is to be loaded</td>
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<td>1.9 Ensure that your work schedules allow objectives to be met within agreed timeframe.</td>
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<td>1.10 Ensure that your preparation activities comply with organisational procedures</td>
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<td>1.11 Confirm that work schedule is consistent with all relevant persons prior to installation.</td>
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<td>1.12 Comply with all relevant regulatory, licensing, contractual, warranty, confidentiality, and health and safety requirements</td>
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</table>
2 Load and Configure Software

2.1 Use destinations for loading software which match installation requirements and organisational procedures

2.2 Load the given software conforming to regulations

2.3 Set configuration options to match installation requirements and to comply with regulations

2.4 Ensure that the installed software is accessible by the intended users

2.5 Resolve any errors occurring during the loading of software, promptly and effectively

2.6 Complete any required product registration procedures promptly and accurately

2.7 Load and configure software to meet given schedules

2.8 Deal with any deviations from agreed schedules, promptly and effectively, following organisational procedures

3 Complete the Installation of Software

3.1 Test suitably for detrimental effects on the integrity of the system caused by your installation of given software.

3.2 Test suitably for detrimental effects on the performance of the system caused by your installation of given software.

3.3 Resolve any identified detrimental effects on system integrity and performance, following organisational procedures

3.4 Inform all relevant persons promptly of the completion of the software installation.

3.5 Complete your software installation records accurately and keep up to date.

3.6 Ensure that the format and presentation of your records conforms to organisational standards

3.7 Ensure that you complete the installation of software to meet given schedules

3.8 Deal with any deviations from agreed schedules promptly and effectively following organisational procedures
UNDERPINNING KNOWLEDGE

System includes:
- Hardware
- Software
- Data

Software includes:
- System software
- Application software

Defects include:
- Incorrect version
- Physical corruption of the disk

Regulations include:
- Current legislation
- Manufacturer’s instructions
- Organisational practices

Schedules include:
- Sequence of installation
- Timeframe

Records include:
- Software installed
- Destination
- Configuration options set
- Date of Installation

UNDERPINNING KNOWLEDGE

1. How to preserve system integrity
2. How to effectively deal with inadequate arrangements
3. How to identify system configurations
4. How to identify incompatibilities between software and systems
5. How to identify defects in software
6. How to effectively deal with defects in software
7. How to establish the sequence in which software is to be loaded
8. How to prepare schedules for the installation of software
9. What are the steps necessary to preserve system integrity
10. What are the procedures used by your organisation for dealing with inadequate arrangements
11. What are the configuration options available for systems
12. What are the factors giving rise to incompatibilities
13. What are the procedures used by your organisation for dealing with software and system incompatibilities
14. What are the factors giving rise to defects in software
15. What are the procedures used by your organisation for dealing with defects in software
16. What are the factors affecting the sequence of installation of software
17. What are the factors determining the achievability of work schedules
18. How to select destinations for loading software
19. How to interpret the relevant regulations to determine the correct methods of loading software
20. How to make software accessible by intended users
21. How to effectively resolve errors in the loading of software
22. How to interpret the relevant regulations to identify product registration procedures
23. How to accurately complete product registration procedures
24. What are the relevant regulations applicable to the installation of software
25. What are the factors influencing the choice of destination for loading software
26. What are the types, and causes, of errors which can arise during loading of software
27. What is the importance of following product registration procedures
28. What are the installation requirements
29. How to identify changes in system integrity
30. How to identify changes in system performance
31. How to effectively deal with detrimental effects on system integrity or performance
32. Who are the persons who should be informed of the completion of software installation
33. How to inform relevant persons of the completion of software installation
34. How to complete and maintain accurate records of installed software
35. How to effectively deal with deviations from schedules
36. What are the changes in system integrity and performance which can be caused by installing software
37. How to deal with detrimental effects of software installation
38. What are the factors determining those persons to be informed of completion of software installation
39. What are the requirements used by your organisation for the format and presentation of software records
40. What are the requirements of the schedules to which you are working
41. What are the procedures used by your organisation for dealing with deviations from schedules

**EVIDENCE GUIDE**

(1) **Critical Aspects of Evidence**
Competency must be demonstrated in the ability to perform consistently at the required standards. In particular, assessors should look to see that the candidate:
- Indicate compliance with organisational policies and procedures
- Apply organisational quality procedures and processes
- Perform all tasks in accordance with standard operating procedures
- Perform tasks to specification
- Use software tools effectively
- Demonstrate the ability to carry out installation procedures
- Interpret job specifications
- Safe and effective operational use of all equipment
- Interactively communicate with others to ensure safe and effective workplace
(2) **Method of Assessment**
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