PERFORM COMPUTER REPAIR AND MAINTENANCE

UNIT CODE: IT/CU/ICT/CR/03/5/B

Relationship to Occupational Standards

This unit addresses the unit of competency**: Perform Computer Repair and Maintenance**

Duration of Unit: 280 hours

Unit Description:

This unit specifies competencies required to perform computer repair and maintenance. It includes performing troubleshooting, disassembling faulty components, repair/replace and reassembling components, testing computer, component functionality and upgrading computer software/hardware.

Summary of Learning Outcomes:

1. Perform troubleshooting
2. Disassemble faulty components
3. Repair/Replace and reassemble components
4. Test computer/component functionality
5. Upgrade computer software/hardware

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Method

1. Perform troubleshooting	• Identification of Computer parts
	  o Hardware
	  o Software
	• Assembling of computer maintenance tools
	• Theory of probable cause
		• Practical exercises
		• Oral questioning
		• Written test
		• Learner portfolio of evidence.

Learning Outcome	Content	Suggested Assessment Method
	• Assembling and disassembling process • Test of theory of probable cause • Problem identification • Appropriate solutions	
2. Disassemble faulty components	• Tools for disassembling • Procedures and techniques for disassembling • Repair or replace and reassemble components	• Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
3. Repair/Replace and reassemble components	• Determine components to replace or repair • Procedures and Techniques for reassembling • Component testing • Repair/replace report	• Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
4. Test computer functionality	• Identify computer testing tools • Testing techniques are identified • Perform computer test functionality • Generate status report	• Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
5. Upgrade computer software/hardware	• Determine Reasons of upgrading • Identify procedures and techniques for upgrading • Test functionality of the upgraded software/hardware	• Practical exercises • Oral questioning • Written test

Learning Outcome	Content	Suggested Assessment Method
		• Learner portfolio of evidence

Suggested Methods of Delivery

- Presentations and practical demonstrations by trainer;
- Guided learner activities and research to develop underpinning knowledge;
- Supervised activities and projects in a workshop;

The delivery may also be supplemented and enhanced by the following, if the opportunity allows:

- Visiting lecturer/trainer from the ICT sector;
- Industrial visits.

Recommended Resources

Tools

- Straight-head screwdriver, large and small.
- Phillips-head screwdriver, large and small.
- Tweezers or part retriever.
- Needle-nosed pliers.
- Wire cutters.
- Chip extractor.
- Hex wrench set.
- Torx screwdriver

Equipment

- Computer
- Tool box

Materials and supplies

Digital instructional material including DVDs and CDs

Consumables for service and repair of suspension and steering systems including:

- Cleaning materials

- Hand cleaner
- Dusters

Reference materials

- Manufacturers manuals