Level 2 Testing ICT systems 2 (7266/7267-405/7540-231)

e-Quals
Assignment guide for Candidates
Assignment C

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Assignment C

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 2 Testing ICT systems 2 (7266/7267-405/7540-231).

Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance

The recommended time allowance for this assignment is **3 hours**.

Level 2 Testing ICT systems 2 (7266/7267-405/7540-231) Candidate instructions

Time allowance: 3 hours

Assignment set up:

This assignment is made up of **two** tasks

- Task A – Prepare to hardwire a workstation into the network hub
- Task B – Test the basic operation of the PC

Scenario

You work as an assistant ICT technician for a manufacturing company. The management are exploring the idea of a simple wireless network on the factory floor to help supervisors keep records and communicate with each other. The senior technician with whom you work has already set up a network and wants to try out various ways of configuring it. You have been given a number of tests to carry out to give a better idea of how well the system is working. In order to keep costs down, some existing cables and other hardware are being used – you need to make sure that they are working properly before you start to use them.

Task A – Prepare to hardwire a workstation into the network hub

The basic wireless network has already been set up but, for some reason, the signal is very weak in one part of the factory. You are asked to prepare to hard-wire a workstation into the network hub – three Cat 5 patch cables have been supplied but their status is not known. The content of **all** tests must be recorded together with the results.

1 Read through Task A and decide what tests you are going to do. List the test information you are going to record.

Q1 State the purpose of

- component testing
- module testing
- unit testing
- sub-system testing
- system testing.

2 Carry out a pre-use check on the test equipment given to you for Task A3.

3 Using the test equipment and connection diagram provided by your Assessor, test **each** of the **three** cables to determine if they are

- straight through and fully connected
- cross-over and fully connected
- not fully connected.

Label **each** cable with the relevant category listed above. Record the results.

4 During the course of one of the following tasks, you will come across at least one fault. Write down the symptoms of the fault and what you think is causing it. Ask your Assessor for the necessary information and/or equipment to deal with the fault. Correct the fault. Carry out a functional check to confirm that the fault has been corrected. Record your actions.

5 Connect the PC into the network and switch it on. Access and record the following information about the PC.

- Operating system version and update status.
- CPU.
- Memory.
- Computer name and workgroup details.

6 Carry out **two** tests on **each** of the following to show they are working correctly.

- Base unit operating system.
- Base unit hardware.
- Keyboard.
- Mouse.
- Network connection.

Record the tests and results. Use screen prints where appropriate.

7 Test the printer to ensure it operates correctly; include a sample of **each** type of test page available. Label the test pages clearly with your name and the date.

Task B – Test the basic operation of the PC

Here you are asked to test the basic operation of the PC on the network and to find out how secure the PC is.

Q2 Briefly describe the difference between testing hardware and testing software. Give **one** example of **each**.

Q3 Describe a typical automated test that you might carry out on the PC in this assignment.

1 The PC should be connected to the network before you start this task. Test **four** aspects of the PC's ability to operate as an Internet-enabled network device. Write down

- details of the tests
- what you expected to find
- what you actually found.

2 Using the diagnostic software or web-based utility provided by your Assessor, follow the instructions to carry out a check on the security of the network and the PC itself. Write down or print out a list of security issues you have found.

Q4 Describe briefly **three** ways in which security software can prevent spyware, viruses and other malware from infecting an Internet-enabled PC.

3 Scan the PC for viruses using the anti-virus software provided. Take or describe actions to quarantine any viruses found. Close down the system.

4 Hand all paperwork and removable storage media to your Assessor. Ensure that your name is clearly identified on your work.

5 Sign above your name and hand all paperwork to your Assessor.

End of assignment

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