Level 3 Maintain ICT equipment and systems 3 (7266/7267-510/7540-328)

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Assignment guide for Candidates
Assignment C

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Contents

Introduction – Information for Candidates	2
Level 3 Maintain ICT equipment and systems 3 (7266/7267-510/7540-328)	3
Candidate instructions	3

Level 3 Maintain ICT equipment and systems 3 (7266/7267-510/7540-328) Assignment C

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Maintain ICT equipment and systems 3 (7266/7267-510/7540-328).

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 **4 hours**.

Level 3 Maintain ICT equipment and systems 3 (7266/7267-510/7540-328) Candidate instructions

Time allowance: 4 hours

Assignment set up:

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

- Task A – Devise a maintenance plan for desktop systems
- Task B – Devise a maintenance plan for laptop systems
- Task C – Fault fixing

Scenario

You work for a software company that, until now, has out-sourced all of its IT system maintenance to a specialist company. In an effort to cut the maintenance budget, your CEO has asked you to take responsibility for system maintenance to see if money can be saved. To make sure that you can do the job and to make sure that the company's day-to-day operations will continue to run smoothly, your manager has set you some maintenance tasks and has asked for some information about IT system maintenance. The company has two separate systems (both connected to the Internet) – the main one, used for software development and general administration, and the trials system where software applications are tested for operation and security vulnerabilities. The trials system is also used for routine, non-critical work.

Task A – Devise a maintenance plan for desktop systems

Your Assessor will give you a description of the system you will be working with in Tasks A and B.

1 Identify the **three** most common types of fault or performance issue that are likely to occur on **each** of the two main systems. All must be different.

2 Briefly describe the type of information you would need to help resolve **each** of the above issues **and** list the best sources of the information in each case.

3 Devise **two** separate maintenance plans, **one** for **each** of the two systems taking account of their different modes of use. Explain the differences between the two plans.

Q1 Explain the importance of negotiating system priorities and availability with system users before planning maintenance activities.

Task B – Devise a maintenance plan for laptop systems

The software engineers also go out to customers' premises to install bespoke software. This is done by connecting a laptop to the customer's system and doing a network install. The software can then be customised without the use of any of the customer's workstations and the engineer can modify the code as necessary using tools installed on the laptop.

1 List the additional technical and security issues that are introduced by using laptops in this way.

2 Devise a maintenance plan for these laptops including any normal maintenance and the additional items needed to address the issues listed in Task B1. The plan must include at least **one** test. Categorise **each** of the maintenance operations as predictive, preventative or remedial **and** indicate clearly when and how often each operation should take place.

Q2 When a laptop is used in this way there may be changes in its performance. Identify and explain **two** ways in which this might happen and what the effects might be.

Task C – Fault fixing

1 Write down **four** relevant questions to ask your Assessor to build up sufficient information to allow you to fix the reported fault in the base unit.

2 Obtain answers to the above questions from your Assessor. Record the answers to your questions and all of the details of the following testing, fault finding and repair tasks.

3 Using the information you have been given, decide and write down the tests you are going to apply to confirm and diagnose the fault on the base unit.

4 Carry out testing and fault diagnosis on the base unit and decide what the fault is.

5 Repair the base unit using spares and materials obtained from your Assessor.

6 Select and carry out post-repair tests and checks to confirm the fault has been cleared.

7 Re-configure the base unit according to instructions supplied by your Assessor and record the settings.

8 Remove any test software and shut down the system.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

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