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

**e-Quals Assignment guide for Candidates** Assignment C



www.cityandguilds.com/e-quals07 August 2009 Version 1.1



#### **About City & Guilds**

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

#### **City & Guilds Group**

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management) which provides management qualifications, learning materials and membership services, NPTC which offers land-based qualifications and membership services, and HAB (the Hospitality Awarding Body). City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

#### **Equal opportunities**

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

#### Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute 2009 and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a locked PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The Standard Copying Conditions on the City & Guilds website also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

#### **Publications**

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)20 7294 2850 or faxing +44 (0)20 7294 3387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds 1 Giltspur Street London EC1A 9DD T +44 (0)20 7294 2800 F +44 (0)20 7294 2400

www.cityandguilds.com learnersupport@cityandguilds.com

# 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

Published by City & Guilds 1 Giltspur Street London EC1A 9DD T +44 (0)20 7294 2468 F +44 (0)20 7294 2400 www.cityandguilds.com

City & Guilds is a registered charity established to promote education and training