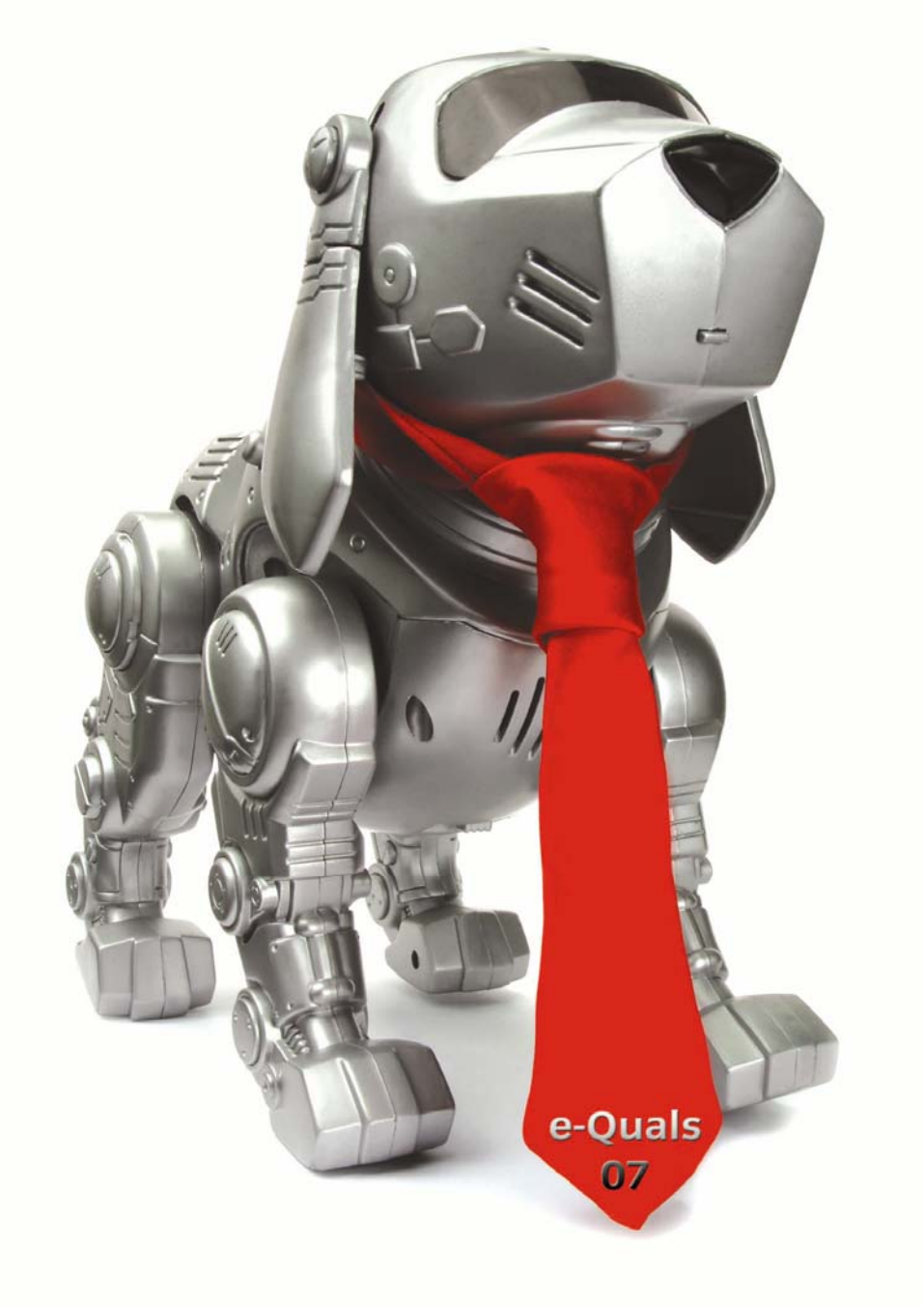
Level 3 Testing ICT systems 3 (7266/7267-505/7540-321)

e-Quals
Assignment guide for Candidates
Assignment A

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, © City & Guilds Limited 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 © City & Guilds Limited. 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 time of publication. 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 responsibility for any 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 Testing ICT systems 3 (7266/7267-505/7540-321)	**Error! Bookmark not defined.**
Candidate instructions	3

Level 3 Testing ICT systems 3 (7266/7267-505/7540-321)
Assignment A

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Testing ICT systems 3 (7266/7267-505/7540-321).

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 **5 hours**.

Level 3 Testing ICT systems 3 (7266/7267-505/7540-321) Candidate instructions

Time allowance: 5 hours

Assignment set up:

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

- Task A – Design a test plan
- Task B – Carry out the test plan
- Task C – Compile a report

Scenario

A customer has expressed general dissatisfaction with their ICT system and has asked for it to be thoroughly tested. The customer has also asked for a comprehensive report on the system condition and performance.

You are required to devise and carry out a suitable test plan, and to produce a report of your findings, including recommendations. Your Assessor will provide you with some information but you will be expected to extract the remaining information from the system and the customer. You will **not** be expected to dismantle the equipment to extract hardware data.

Task A – Design a test plan

1 Using the available operating system tools and the information provided, carry out a hardware and software audit and record details on the Audit Logs.

2 Using the information gathered in A1, ascertain and list **six** tests and **six** monitoring operations that could be carried out on the system.

3 On the answer sheet, write **four** questions you would ask a user in order to gain extra information. Show these questions to your assessor and obtain answers to them.

4 Using all the above and other information (eg gathered from manufacturer's manual, web site, etc.), design a test plan for hardware and software, made up from standard test procedures. Note in the comments column any tests that may affect existing data and the measures to be taken to prevent loss or corruption of data. The test plan **must** include all **six** tests and monitoring operations from Task A2.

Q1 State **three** reasons why, when devising a test plan, it should be discussed with the customer.

Task B – Carry out the test plan

1 Record the system configuration using screen prints.

2 Record the user settings using screen prints.

3 Carry out a scan for viruses and spyware and record the results using screen prints.

4 Carry out any measures required to prevent loss or corruption of data.

5 Carry out the planned test schedule, recording the expected and actual results of each test in turn.

6 Restore the system configuration and user settings to their former state as recorded in B1 and B2. Record using screen prints.

Q2 Name **four** further items of test equipment or specialist test software commonly used to test and monitor ICT systems, including networks.

Task C – Compile a report

1 Using the data collected in Tasks A and B, compile a short written report detailing:

- any faults found during the tests
- recommended repair action and/or action carried out to allow the tests to continue
- actual system performance compared with expected performance
- recommended upgrade/modification options to improve performance.

Q3 Describe the purpose and function of the following.

a) Network Protocol Analyser.
b) Stress Test Software.

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 company registered in England and Wales (company number 16513878)