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

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

e-Quals
Assignment guide for Candidates
Assignment A

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 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) Assignment AA

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 – Produce a planned maintenance schedule
- Task B – Diagnose a persistent fault on a system
- Task C – Repair the fault and test the system

Scenario

A manufacturing company has a small client-server network on its premises. It consists of a server, four work stations and two printers (one laser, one ink-jet). One workstation is situated in a production workshop where sheet metal is cut, bent and welded. Additionally, the MD transfers files to and from his laptop.

Task A – Produce a planned maintenance schedule

1 Devise a preventative maintenance schedule for the system, including the laptop. Include in your schedule the

- item to be maintained
- frequency of maintenance
- description of the maintenance procedure
- reason for the maintenance procedure (what is it designed to prevent?)
- any anticipated down time or service disruption.

2 Produce a draft planned maintenance chart to be used as a reference/record.

Q1 Identify and describe the **three** main categories of system maintenance.

Q2 Identify and describe **two** types of remote maintenance that could be carried out on ICT equipment

Q3 Identify **four** different routine maintenance procedures for ICT equipment and explain the purpose for **each**.

Task B – Diagnose a persistent fault on a system

The network supplied has a fault. Your assessor will supply the exact symptoms. The system has had functional testing only, which did not reveal the root cause of the fault.

1 Devise a test plan using both functional tests and diagnostic software to pinpoint the root cause of the fault Produce a draft audit procedure for each operating system.

2 Produce a chart on which to record the tests, expected results and actual results.

3 Carry out the test plan, recording the results on your test chart.

4 Use the results to come to a decision on the best course of action to resolve the problem. Record the decision on the test chart.

5 Give reasons for your decision.

Q4 Identify **four** external, non-system factors that could impact on the operation of an ICT system.

Q5 Identify **four** internal, system factors that could impact on the operation of an ICT system.

Task C – Repair the fault and test the system

1 Discuss your findings with your Assessor and request any replacement parts you might need to repair the faults.

2 Take any necessary precautions to safeguard data and software on the system and record them on the test chart.

3 Replace any faulty parts and configure/reconfigure the system as necessary.

4 Test the system to ensure you have resolved the problem. Record the results on the test chart.

5 Demonstrate to the assessor that the reported problem has been resolved.

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)