Level 3 Maintain ICT equipment and systems 3

(7540-328/7630-338)

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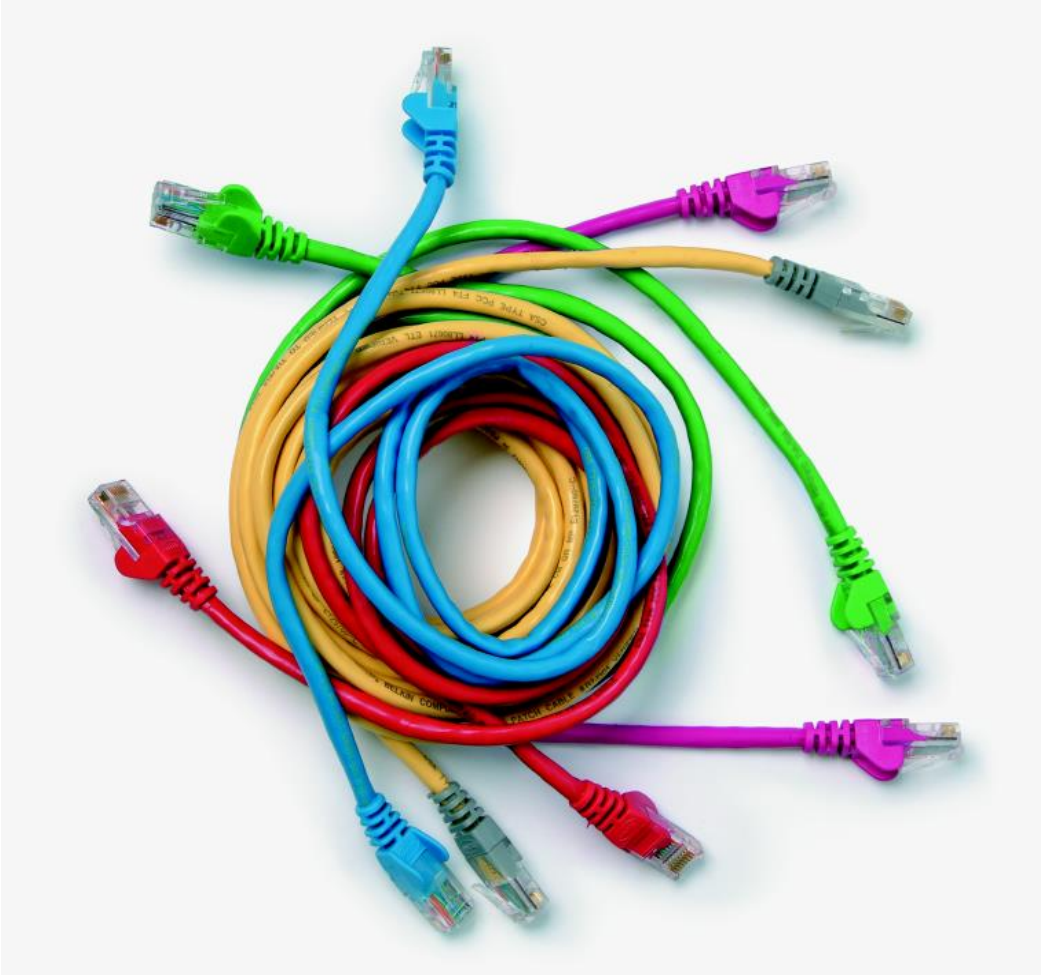
Systems and Principles
Assignment guide for Candidates
Assignment A



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Level 3 Maintain ICT equipment and systems 3 (7540-328/7630-338)
Assignment A
Introduction – Information for Candidates

About this document
This assignment comprises all of the assessment for Level 3 Maintain ICT equipment and systems 3 (7540-328/7630-338).

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 (7540-328/7630-338)

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 Managing Director transfers files to and from a 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
- the frequency of maintenance
- the description of the maintenance procedure
- the 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.

(Use the Answer sheet provided to answer the following)

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

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

Task B – Diagnose a persistent fault on a system

The network supplied has a fault. The 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 suitable test plan using both functional and diagnostic tests 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 expected and actual results of the tests.
Carry out the test plan, recording the expected and actual results on your Test Chart.

3 Use the results to come to a decision on the best course of action to resolve the problem. Record the decision and the resources required on the Test Chart.

(Use the Answer sheet provided to answer the following)

Q3 Identify **three** factors which may cause differences between the actual and expected performance.

Q4 Identify **three** non-system factors which may cause differences between the actual and expected performance.

Task C – Repair the fault and test the system

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

Q5 Describe the actions that needed to be taken in Task A and B to comply with legislation regarding confidentiality, security and data protection on the Answer sheet provided.

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

3 Test the system to ensure you have resolved the problem. Record the results on the Test Chart.

4 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

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