Level 3 Maintain ICT equipment and systems 3

(7540-328/7630-338)

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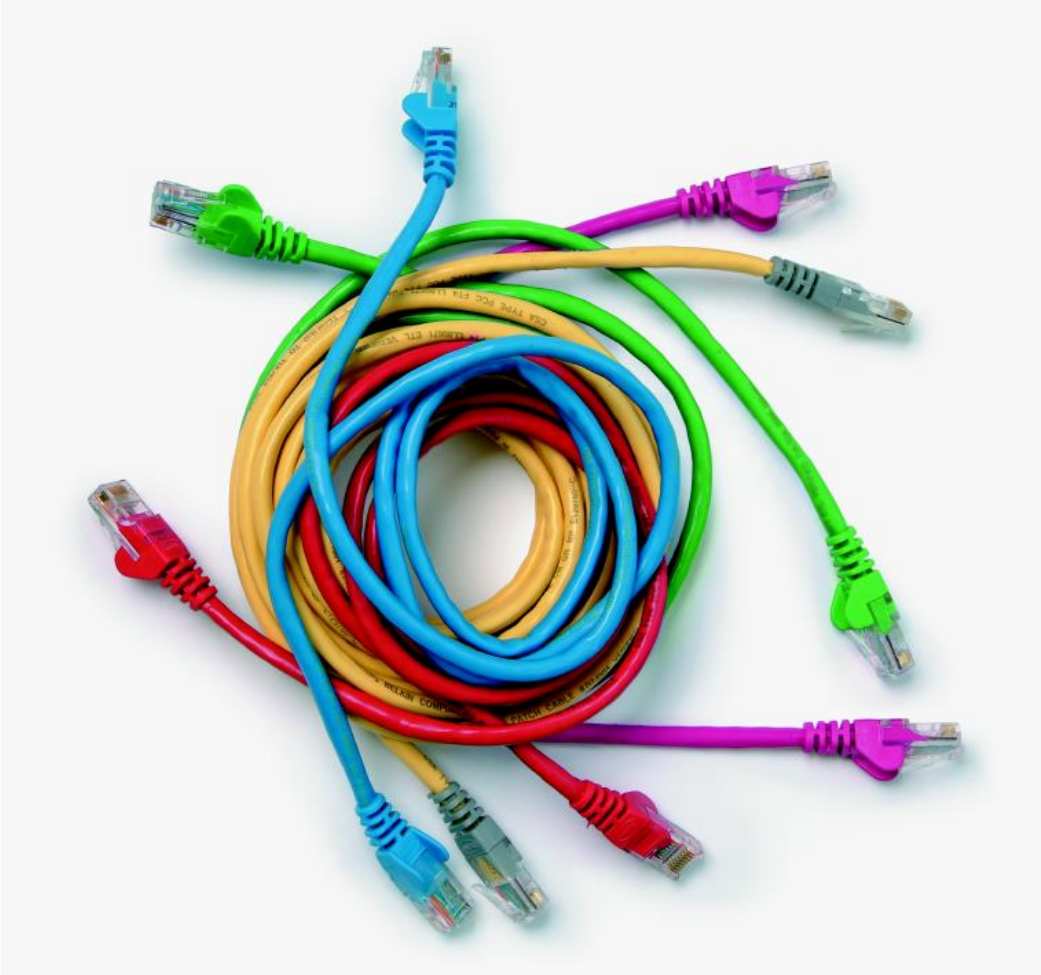
Systems and Principles
Assignment guide for Candidates

Assignment B



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Level 3 Maintain ICT equipment and systems 3 (7540-328/7630-338)
Assignment B
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 – Identify suitable maintenance activities
- Task B – Collect information on technical problems
- Task C – Evaluate problems and implement solutions

Scenario

You have recently taken over as the site based engineer for a large call centre. Your manager has asked you to spend a couple of days in this role as the customer has complained of ineffective support. Your first task will be to identify any proactive action that can be taken and then collect a suitable library of reference sources.

To re-establish customer confidence, it will be necessary to carry out a repair to rectify a longstanding problem. It is important that this repair is carried out with a full explanation of all the stages involved, complying with Industry best practice and relevant legislation.

The call centre equipment includes:

- 4 departmental servers
- 150 ICT workstations
- 15 laser printers
- 5 inkjet printers
- 2 dot matrix printers

You will be given details of the system and the utilities available to you, together with a list of routine tasks to perform.

You should carry out these tasks as instructed recording details of the task, results of tests and any problems encountered. Appropriate documentation will be provided for this purpose. Underpinning knowledge questions should be answered on the answer sheet provided.

Task A – Identify suitable maintenance activities

1 Using research materials as directed by the Assessor, prepare a maintenance plan for the complete system. The plan should include, for each of the **five** types of equipment:

- frequency of preventive maintenance
- possible predictive maintenance
- consumables required
- time required for maintenance
- potential time needed for corrective maintenance
- information to be recorded during maintenance.

The plan should consist of a chart scheduling the maintenance over a 4-month period:

- ask the assessor to confirm any periods of systems unavailability to be included in the schedule
- assume that there are no existing maintenance records
- estimate the total number of hours that will be required over the period of the plan.

Q1 On the Answer sheet provided, identify and describe **two** types of remote maintenance that could be carried out on ICT equipment.

Task B – Collect information on technical problems

1 To reinforce the need for maintenance, prepare a support chart to be used by visiting engineers. The chart should contain **two** serious problems that can be caused to each of the items listed in the plan when preventative or predictive maintenance is neglected. The details should include information on:

- manufacturers' support sites
- spare parts that would be required to provide any corrective action.

2 Design a simple fault log with **seven** headings for recording essential data when logging calls on site.

Q2 On the Answer sheet provided, state **two** methods that could be used to check the correct application of tests.

Task C – Evaluate problems and implement solutions

1 Demonstrate the replacement of a major system component in the unit supplied by the Assessor. This task should be completed using industry best practice.

Prepare notes as you carry out this repair giving relevant information on each step.

It is important that the notes are of a standard to establish confidence with the customer as they have said that they wish to review the process. The demonstration must include:

- assessing resources
- checking system availability
- ensuring data integrity
- correct use of tools and processes
- testing and configuration
- handing back to the customer
- fully completing documentation.

(Use the Answer sheet provided to answer the following)

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

Q4 Give **one** possible source of additional information when carrying out Task C1, for:

- the supply of technical information
- regulatory information
- product specification.

Q5 State the types of resources you have required in order to apply solutions to technical problems both hardware and software.

Q6 State what other system information might be evaluated when identifying differences between actual and estimated system performance.

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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