Level 2 Install, configure and test ICT networks (7266/7267-408/7540-235)

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e-Quals
Assignment guide for Candidates
Assignment A

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Level 2 Install, configure and test ICT networks (7266/7267-408/7540-235) Assignment A

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 2 Install, configure and test ICT networks (7266/7267-408/7540-235).

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 2 Install, configure and test ICT networks (7266/7267-408/7540-235) Candidate instructions

Time allowance: 4 hours

Assignment set up:

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

- Task A – set up, configure and test a peer-to-peer network consisting of two computers
- Task B – manage user accounts on a network.

Scenario

A company, Sigma Networks provide installation and technical support services for clients networks. They receive requests from clients for network installation and maintenance and support services. Technicians are then sent out to a client's site to provide the service required. Two jobs have been assigned to you.

A Proton Printing, a small print service company using two standalone computers, require a network to be set up to allow them to backup their daily work quickly and easily at the end of the day. Your manager has decided that a peer-to-peer network would satisfy this requirement and has asked you to visit the company to set up the network.

B A new LAN has just been installed for Axiom Marketing a small market research company. The user accounts must now be set up. Your manager has asked you to visit the company and set up the user accounts.

Hand in your written answers on the answer sheet provided.

Task A

In this task you are required to connect two computers in a peer-to-peer network and undertake some file and print operations on the network.
You are permitted to use manufacturer's manuals and tutor notes.

1 Produce the following planning information for the hardware and software requirements of the network.
   a) The name of the operating system and the software publisher.
   b) Cable types and connectors required.
   c) Network Interface Card (NIC) type and speed.
   d) Type of switch/hub and speed.
   e) Software required (eg drivers, client, sharing, protocol).

   Label this PLANNING.

2 Use appropriate tools and safety/ESD protection equipment to

a) disconnect the computers from the power supply
b) remove their covers
c) install the network cards into the computers
d) make any required connections.

3 Ask your assessor to check the safety of your installation. After approval,

a) refit the covers
b) connect the computers to the power supply, switch them on and boot up
c) if the NIC uses software for set-up, use the supplier's software to configure the NIC.

4 Install and configure the appropriate components to allow the computers to be connected in a peer-to-peer network including manually setting up the protocols. Take a screen print of the outcome

5 Set up suitable computer and workgroup names for all computers and take a screen print.

6 Configure the computers to access resources to

a) allow full access to all users to the hard drive on all computers
b) share the printer and give it a share name to include the printer's make or unique identifier.

Demonstrate to your Assessor the operation of the network components (eg to show hard drive and printer access over the network).

7 Test the functionality of the network file system.

a) Log on to a computer that does not have the printer attached.
b) Create a directory/folder on one of the other computers.
c) Create a text file with your name in the first line of the text.
d) Save the text file with the filename yourname.txt in the directory/folder that you created on the other computer.
e) Test access to the printer by printing the text file created in d. Label this printout PRINTOUT1.
f) Write down, on PRINTOUT1, the paths of the directory/folder and file that you created.
g) Log off the computers.

8 Some simple faults or errors may prevent a network from functioning correctly. From your knowledge of common faults, write down **two** possible hardware faults and **two** possible software faults that could occur.

Task B

In this task, you are required to plan for and set up user accounts for the network for Axiom Marketing.

The company employs 20 permanent members of staff and has a total workforce of 40. They all work on a 9am-5pm basis.

Some employees are temporary and may only work for the company for very short periods of up to a maximum of 4 months. This temporary status must be reflected in the usernames.

Each employee requires a secure home folder and a user account. You should use the word 'password' whenever you need to set up user passwords during this task. Please note that this is not generally good security practice but the method should be used in this assignment.

1 Develop and state a naming convention that will accommodate all employees, taking into account the possibility of duplicate names and the requirements for temporary staff.

2 Use the Usernames table to produce a list of **ten** example names and their respective usernames including **two** examples for temporary staff.

3 a) Write, on the Usernames table, the location (paths)of the home folders.
b) On the answer sheet, justify your reasons for using this location for the home folders.

4 On the computer network, log on as administrator.

5 Create **five** new user accounts and home folders, using names from your list. These should be for permanent members of staff.

6 a) Create **two** new user accounts and home folders for temporary staff, using details from your list.
b) These temporary members of staff are on three month fixed contracts from today. Explain how these accounts should be restricted.

7 a) Apply restrictions to **all** of the home folders created to allow access to only that user.
b) Attempt to access a folder from another login and take a screen print of the result.

8 Provide printouts of **all** the user accounts created and label these PRINTOUT2.

9 Provide screen prints of the home folders.

10 Log off the network.

11 Hand all paperwork and removable storage media to your Assessor. Ensure that your name is clearly identified on your work.

12 Sign above your name and hand all paperwork to your Assessor.

End of assignment

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