



GCE A level

1647/02

**APPLIED INFORMATION &
COMMUNICATION TECHNOLOGY**

UNIT AICT7 – Part B

Practical Tasks

A.M. TUESDAY, 17 June 2014

2 hours

1647
02.0001

INSTRUCTIONS TO CANDIDATES

1. Tasks are based on *Garth View Farm Shop* scenario as in Part A.
2. Read the tasks carefully to make sure that you understand what is needed.
3. Carry out all tasks and make sure that you check your work carefully to ensure that the work you produce is accurate and correct.
4. You have a total of two hours to complete your work. *The Recommendation* is worth 20 marks and *The Implementation* is worth 40 marks. You are advised to divide your time accordingly.
5. You will be using *Network Design Software* for *The Recommendation*.
6. You will be using *Server Simulation Software* for *The Implementation*.

The Recommendation

Instructions for candidates

In the folder named *Network Design Software* there is an internet shortcut icon named *Network Design*. Double-click the icon to run the Network Design Software.

You will see a plan of Garth View Farm Shop with the existing hardware and eleven physical network components to be used to design the network.

A component is selected by clicking the component once. It will appear on the plan. It can then be dragged to the required location on the plan of Garth View Farm Shop and dropped.

You can use any of the network components as many times as required.

If you want to remove a component it can be dragged and dropped into the bin located to the right of the plan.

The components can be dropped anywhere in a location but it must be clear in which location each component is placed.

You are required to provide a screen shot and a written response for Task 1 and written responses for Task 2, Task 3 and Task 4, all to be saved in a document named *The Recommendation*.

Save your work regularly.

The system

The business currently owns one computer and one printer which will be located in the new Office.

Customers will be able to place orders over the counter in the General Store, the Butcher and the Delicatessen.

Telephone orders will be taken in the Office.

Customers will be able to buy fruit and vegetables from the General Store, meat and poultry from the Butcher and dairy products from the Delicatessen. These purchases will be made using the existing cash registers and will not be linked to the new network ordering system.

At the end of each day all the orders will be printed in the Office and given to staff to collect the produce from the General Store, the Butcher and the Delicatessen, ready for next day delivery.

Mrs Megan Rees would like to be able to contact all customers to promote products. This could be achieved by sending a flyer to inform customers of seasonal produce or special offers.

The owner would also like management information about the performance of each section of the business.

Garth View Farm Shop has expanded from a small shop into a thriving diversified business, competing with national brands. The owner is expecting the business to expand further and to employ many new staff, particularly at Easter and Christmas when the number of orders being placed is expected to increase.

The Objectives

These objectives should be read carefully and referred to throughout Part B.

The Objectives for the new networked ordering system are to enable:

1. the network to be managed from the Office
2. the manager in the General Store to update the Order Database and view the Customer Database
3. the manager in the Butcher to update the Order Database and view the Customer Database
4. the manager in the Delicatessen to update the Order Database and view the Customer Database
5. the staff in the General Store to view the Order and the Customer Databases
6. the staff in the Butcher to view the Order and the Customer Databases
7. the staff in the Delicatessen to view the Order and the Customer Databases
8. the owner and the administrators to update the Order and the Customer Databases
9. the owner and the administrators to save created database reports for the Order and the Customer Databases
10. the owner and the administrators to print out all orders in the Office

Task 1

[10]

Open a new word processed document and save it as *The Recommendation*.

Using the *Network Design Software*, select the **most appropriate** physical network components and position these in the **most suitable location** to design a network that will allow the staff at Garth View Farm Shop to achieve *The Objectives*.

When you have completed your network design, take a screen shot of the plan of Garth View Farm Shop and save it in *The Recommendation* document.

Close the *Network Design Software*.

Justify your choice of each physical network component that you used to design the network, clearly stating the reason for the location of each physical network component.

Add your answer to *The Recommendation* document.

Save your work.

Task 2

[3]

Garth View Farm Shop will be promoting its products by sending letters to all customers. The shop could collect the email addresses of customers and send emails containing promotions.

- (a) Garth View Farm Shop will save money on postage costs by using email; describe **two** other benefits for Garth View Farm Shop of communicating with its customers using email.
- (b) Explain why some customers might not want to receive such emails.

Add your answer to *The Recommendation* document.

Save your work.

Task 3

[4]

Garth View Farm Shop will insist that all its employees comply with their Acceptable Usage Policy (AUP). One section of the AUP will relate to employees using email and the Internet.

Write **two** statements that could be used in Garth View Farm Shop's AUP and describe **two** sanctions that may be enforced if an employee does not comply with its AUP.

Add your answer to *The Recommendation* document.

Save your work.

Task 4

Garth View Farm Shop is concerned about security threats to its network. Two types of software that should be installed to protect against security threats are a *firewall* and *anti-virus* software.

(a) Briefly explain how *anti-virus* software would prevent security threats. [2]

(b) The *firewall* could be installed on a separate computer being used as a proxy server. Briefly describe the role of this proxy server. [1]

Add your answer to *The Recommendation* document.

Save your work.

The Implementation

Instructions for candidates

The network hardware and software have been installed and you now have to configure the network.

You will need to refer to *The Objectives* throughout The Implementation.

In the folder named *Server Simulator Software* there is an Internet shortcut icon named *Server Simulator*. Double-click the icon to run the Server Simulator Software.

You will see a simulated desk top with *Server Simulation Software*, a shortcut to *Documents and Settings* folder and a shortcut to *Printers and Faxes*.

You are required to provide written responses and screen shots for the tasks, all to be saved in a document named *The Implementation*.

Save your work regularly.

Task 5

[6]

Open a new word processed document and save it as *The Implementation*.

A 'Best Practices' document is required to provide rules for the naming of objects on the network.

Write **three** rules that should be included in the 'Best Practices' document.

For **each** of the three rules, give an example of a suitable name.

For **each** of the three rules, give an example of a name that would be disallowed.

Add your answer to *The Implementation* document.

Save your work.

Task 6

[2]

Write down your naming convention for the login names of the users on the network. Explain your reasons for the naming convention that you have chosen.

Add your answer to *The Implementation* document.

Save your work.

Task 7

[2]

Using your naming convention from **Task 6**, write down login names for the users that are going to be created for the Garth View Farm Shop network.

- Mrs Megan Rees, the owner
- Miss Mai Rees, administrator
- Mr John James, manager in the General Store
- Mr Harold Jackson, manager in the Butcher
- Mr John James, manager in the Delicatessen
- Miss Michelle Rees, staff in the General Store
- Mr Joshua James, staff in the Butcher
- Miss Mali Rees, staff in the Delicatessen

Add your answer to *The Implementation* document.

Save your work.

Task 8

[2]

Using a sensible naming convention, write down names for the computers that are going to be created for the Garth View Farm Shop network.

Add your answer to *The Implementation* document.

Save your work.

Task 9

[3]

Decide what groups need to be created to allow *The Objectives* to be achieved.

Using a sensible naming convention, write down names and a brief description of the groups that are going to be created.

Add your answer to *The Implementation* document.

Save your work.

Task 10

[1]

Decide on suitable names for the **two** shared folders that are going to contain the Order Database and the Customer Database.

Using a sensible naming convention, write down the names of the shared folders.

Add your answer to *The Implementation* document.

Save your work.

Task 11

[3]

State the permissions that **each** group should have for the shared folder that contains the Order Database. Give reasons for your choices. The permissions should allow *The Objectives* to be achieved.

Add your answer to *The Implementation* document.

Save your work.

Task 12

[3]

State the permissions that **each** group should have for the shared folder that contains the Customer Database. Give reasons for your choices. The permissions should allow *The Objectives* to be achieved.

Add your answer to *The Implementation* document.

Save your work.

Task 13

[2]

Using the server software, create new user accounts for all the users of the Garth View Farm Shop network.

Set the password to 'Garth'. This must be changed the first time each user logs on.

Take a screen shot as evidence that you have typed in a password and that the user must change the password at next log on. Give this screen shot the heading 'Screen Shot 13a'.

Take a screen shot as evidence that you have created the **8** new users. Give this screen shot the heading 'Screen Shot 13b'.

Add your answer to *The Implementation* document.

Save your work.

Task 14

[2]

Using the server software, create the groups named in **Task 9**, accepting all default properties.

Take a screen shot of the Active Directory window with 'Users' being displayed in the right-hand panel as evidence that you have created the groups. Give this screen shot the heading 'Screen Shot 14'.

Add your answer to *The Implementation* document.

Save your work.

Task 15

[3]

Using the server software, add the correct users to the correct groups to allow *The Objectives* to be achieved.

Take a screen shot of **each** 'Group' dialogue box with the 'Members' tab selected as evidence that you have added members to the group. Give these screen shots the heading 'Screen Shots 15'.

Add your answer to *The Implementation* document.

Save your work.

Task 16

[4]

Create the shared folder to be used to store the Order Database.

Set the 'Permissions' for **each** group that you have created.

Take a screen shot for **each** group of the 'Permissions' dialogue box as evidence that you have set the permissions for **each** group. Give these screen shots the heading 'Screen Shots 16'.

Add your answer to *The Implementation* document.

Save your work.

Task 17

[4]

Create the shared folder to be used to store the Customer Database.

Set the 'Permissions' for **each** group that you have created.

Take a screen shot for **each** group of the 'Permissions' dialogue box as evidence that you have set the permissions for **each** group. Give these screen shots the heading 'Screen Shots 17'.

Add your answer to *The Implementation* document.

Save your work.

Task 18

[2]

Using the server software, create **four** new computers for the network.

Take a screen shot of the Active Directory window with 'Computers' being displayed in the right-hand panel as evidence that you have created the **four** computers. Give this screen shot the heading 'Screen Shot 18'.

Add your answer to *The Implementation* document.

Save your work.

Task 19

[1]

Add an HP DeskJet BW printer.

Take a screen shot of the last dialogue box of the 'Add Printer Wizard' as evidence that you have added a printer as requested. Give this screen shot the heading 'Screen Shot 19'.

Add your answer to *The Implementation* document.

Save your work.

Close *The Implementation* document.

This is the end of *The Implementation*.

END OF PAPER