



GCE A level

1647/02

**APPLIED INFORMATION &
COMMUNICATION TECHNOLOGY**

UNIT AICT7 – Part B

Practical Tasks

P.M. TUESDAY, 11 June 2013

2 hours

1647
020001

INSTRUCTIONS TO CANDIDATES

1. Tasks are based on *Gwesty'r Pentref* 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 Gwesty'r Pentref 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 Gwesty'r Pentref 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 new system

The hotel reception staff and hotel manager will make room reservations. When a guest checks out of the hotel their bill will be printed at the Hotel Reception.

Guests and visitors will need to contact reception to book a table at the Restaurant, a beauty treatment at the Health Club and a fitness session at the Fitness Centre.

The Restaurant manager and their team at the Restaurant will be able to check the booking when a guest or visitor arrives to eat at the Restaurant.

The Health Club manager and their team at the Health Club will be able to check the booking when a guest or visitor arrives for a treatment at the Health Club.

The Fitness Centre manager and their team at the Fitness Centre will be able to check the booking when a guest or visitor arrives for a session at the Fitness Centre.

Hotel guests will receive a discount at the Restaurant, Health Club and Fitness Centre.

The hotel manager would like to be able to contact all previous visitors and guests to promote the hotel and facilities. This could be achieved by sending a letter to inform guests of special offers when the hotel has low occupancy.

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

Gwesty'r Pentref is going to employ new permanent staff and many temporary staff to work in the new facilities.

The Objectives

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

The Objectives for the new system are to allow:

1. the network to be managed from the Hotel Reception
2. the manager in the Restaurant to update the Booking Database and view the Room Reservation Database
3. the manager in the Health Club to update the Booking Database and view the Room Reservation Database
4. the manager in the Fitness Centre to update the Booking Database and view the Room Reservation Database
5. the staff in the Restaurant to view the Booking and Room Reservation Databases
6. the staff in the Health Club to view the Booking and Room Reservation Databases
7. the staff in the Fitness Centre to view the Booking and Room Reservation Databases
8. the hotel manager and the hotel reception staff to update the Booking and Room Reservation Databases
9. the hotel manager and the hotel reception staff to save created database reports for the Booking and Room Reservation Databases
10. the hotel manager and the hotel reception staff to print out room bills at the Hotel Reception.

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 Gwesty'r Pentref to achieve *The Objectives*.

When you have completed your network design take a screen shot of the plan of Gwesty'r Pentref 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.

Save your work.

Task 2

[5]

Gwesty'r Pentref could use a wireless communication infrastructure or cable communication infrastructure to connect the physical network components. Give detailed reasons why Gwesty'r Pentref has decided to use a wireless communication infrastructure to connect the physical network components that you selected in Task 1.

Save your work.

Task 3

[2]

The hotel has access to the Internet. Describe the hardware required to allow Internet access at each workstation and briefly describe the role of this hardware.

Save your work.

Task 4

[3]

Gwesty'r Pentref will store personal data about their guests on their new network. They are registered with the Information Commissioner. They will ensure that the data that they store will be fairly and lawfully processed and processed for limited purposes. State **three other** principles of the Data Protection Act that will apply to the data held by Gwesty'r 'Pentref.

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 marks]**

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

Rules used when naming objects in network systems ensure the objects will be recognised by different systems and older versions of existing systems. These rules are used when the network is initially installed and also later when adding new objects such as computers.

Write down **three** rules that you would use when creating computer names. Give an example of a name that satisfies **each** rule and a name that would break **each** rule.

Add your answer to *The Implementation* document.

Save your work.

Task 6**[2 marks]**

Write down your naming convention for the login names for the users of the network given below and explain your reasons for the naming convention that you have chosen.

- Mr Alun Jones, the hotel manager
- Ms Andrea McCarthy, reception staff
- Mrs Anne McCarthy, manager in the Restaurant
- Mr Andrew Jones, staff in the Restaurant
- Mrs Julia Andrews, manager in the Health Club
- Miss Alexandra Entwistle, staff in the Health Club
- Mr Gareth Smith, manager in the Fitness Centre
- Mr Gordon Smith, staff in the Fitness Centre

Add your answer to *The Implementation* document.

Save your work.

Task 7**[2 marks]**

Using your naming convention write down login names for the users that are going to be created for the Gwesty'r Pentref network.

Add your answer to *The Implementation* document.

Save your work.

Task 8**[2 marks]**

Write down names for the computers that are going to be created for the Gwesty'r Pentref network.

Add your answer to *The Implementation* document.

Save your work.

Task 9**[3 marks]**

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

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 mark]**

Decide on names for the **two** shared folders that are going to contain the Booking Database and the Room Reservation Database.

Write down the names of the shared folders.

Add your answer to *The Implementation* document.

Save your work.

Task 11**[3 marks]**

State the permissions that **each** group should have for the shared folder that contains the Booking 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 marks]**

State the permissions that **each** group should have for the shared folder that contains the Room Reservation 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 marks]**

Using the server software, create new user accounts for all the users of the Gwesty'r Pentref network.

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

Take a screen shot for the **first user** created of the third 'New Object – User' dialogue box 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 a heading 'Screen Shot 13a'.

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 **8** new users. Give this screen shot a heading 'Screen Shot 13b'.

Add your answer to *The Implementation* document.

Save your work.

Task 14**[2 marks]**

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 a heading 'Screen Shot 14'.

Add your answer to *The Implementation* document.

Save your work.

Task 15**[3 marks]**

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 marks]**

Create the shared folder to be used to store the Booking 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 a heading 'Screen Shots 16'.

Add your answer to *The Implementation* document.

Save your work.

Task 17**[4 marks]**

Create the shared folder to be used to store the Room Reservation 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 a heading 'Screen Shots 17'.

Add your answer to *The Implementation* document.

Save your work.

Task 18**[2 marks]**

Using the server software, create **five** 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 **five** computers. Give this screen shot a heading 'Screen Shot 18'.

Add your answer to *The Implementation* document.

Save your work.

Task 19**[1 mark]**

Add a 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 a 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.
