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**OCR GCSE INFORMATION AND COMMUNICATIONS TECHNOLOGY B** **1995**

**OCR GCSE (SHORT COURSE) INFORMATION AND COMMUNICATIONS TECHNOLOGY B** **1095**

**EXEMPLAR COURSEWORK TASKS:  
THE USE OF ICT IN THE HEALTH SERVICE**

This document provides examples of tasks for use in delivering Unit 2 for ICT B 1095/1995. The tasks will allow candidates to gain experience of a number of software packages.

You may adapt these tasks to suit your candidates or you may set your own. It is recommended that the tasks be based on ICT in the Health Service.

## ICT Contexts

The new context for the ICT B 1095/1995 is the Use of ICT in the Health Service. To help teachers to plan for future years' contexts, these are set out below.

Year	Session	Unit	Type	Context
2005	January	2378 & 2379	Coursework	Use of ICT in Retailing
2005	January	2380	Examination	Use of ICT in Retailing
2005	June	2378	Coursework	Use of ICT in Retailing <b>or</b> Use of ICT in the Health Service *
2005	June	2379	Coursework	Use of ICT in Retailing
2005	June	2380	Examination	Use of ICT in Retailing
2006	January	2378 & 2379	Coursework	Use of ICT in the Health Service
2006	January	2380	Examination	Use of ICT in the Health Service
2006	June	2378 & 2379	Coursework	Use of ICT in the Health Service
2006	June	2380	Examination	Use of ICT in the Health Service
2007	January	2378 & 2379	Coursework	Use of ICT in the Health Service
2007	January	2380	Examination	Use of ICT in the Health Service
2007	June	2378	Coursework	Use of ICT in the Health Service <b>or</b> Using ICT to aid Travel *
2007	June	2379	Coursework	Use of ICT in the Health Service
2007	June	2380	Examination	Use of ICT in the Health Service

\* The coursework submission for Unit 2 only in this session may be based either on the current context or may address the context for the following year.

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## Introduction

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All of the coursework tasks are centred on an imaginary newly built Health Centre/Group Practice.

Three independent General Practices are to merge into a newly built Health Centre. It is hoped that by joining forces and investing in ICT, patients will receive better health care.

The Health Centre is in a village called Brownsville, and will be called “The Howard Health Centre.”

The following project (split into individual tasks) offers guidance only as to the types of activities that candidates might wish to undertake to fulfil the requirements of the coursework units. In completing the tasks, candidates must identify the data requirements, select the correct hardware and software and design a system that would be appropriate in the set context. Candidate portfolios will be assessed in accordance with the marking criteria for internally assessed work outlined in the specification. Candidates undertaking a Full Course will need to extend or produce a new task to meet the additional requirements for the course.

This is exemplar material only and it is not intended for candidates to reproduce and submit as coursework.

*Centres should be aware that the question papers for Unit 4 (2380) set for 2006 and 2007 will primarily focus on the use of I.C.T. within the Health Service.*

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## The Project – Payday at the Howard Health Centre

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### DESCRIPTION OF THE PROJECT

This project is based in the new administration office of The Howard Health Centre and it is to assist the Senior Office Administrator in creating weekly payslips for staff.

The project can be broken down into 6 discrete tasks:

- The introduction, research and analysis of the project
- The design and creation of the Health Centre logo
- The design and creation of a spreadsheet to calculate staff wages
- The design and creation of a standard wage slip
- The use of mail merge techniques to create the individualised payslips
- Writing a series of reports on the work that has been completed

### TASK 1

Write an Introduction **and** Analysis to the project using your research materials.

### TASK 2

The Health Centre wishes to promote itself by way of a logo that can be used on all letters, posters and payslips. Design and produce a suitable logo for the Health Centre.

Amend your logo to include a suitable slogan then produce a printout. Complete an evaluation sheet on the task.

### TASK 3

The Senior Office Administrator wishes to set up a spreadsheet that will hold details of the staff and will calculate their pay. You will need to collect relevant data such as the staff member's name, position, hours worked, pay rate and overtime rates.

You will need to design and create a data capture form to collect this information. Design and create a spreadsheet to put this information in. Print out the spreadsheet showing the data. Print out another copy of the spreadsheet showing the formulae used.

#### **TASK 4**

The Senior Office Administrator wishes to create a wage slip for each worker. Design and create a wage slip.

The logo from Task 2 can also be added to the wage slip. Print out a copy of the wage slip. You will need to design and create a wage slip.

#### **TASK 5**

The information in the spreadsheet can now be used to create individualised wage slips for each employee. This can be done using mail merge. Print out a copy of the wage slip showing the merge fields. Print out another copy of the wage slip showing the staff details.

#### **TASK 6**

Write reports on each of the following:

- i. The Hardware and Software you have used
- ii. Comparing the use of Input and Output methods and Devices
- iii. User Guide / User Documentation
- iv. Testing and Evaluating the Documentation
- v. How the use of ICT has benefited my system
- vi. The Social, Economic, Legal and Moral Effects of ICT.

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## Example Task 1 – Introduction and project analysis

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This project is based in the new administration office of The Howard Health Centre and it is to assist the Senior Office Administrator in creating weekly payslips for the Health Centre staff.

I have decided to design a logo for the Health Centre as this helps people to immediately identify the new Health Centre.

Other NHS (National Health Service) Trusts and organisations have logos:

<i>Sample logos from other NHS Trusts</i>	<i>Sample logos from other NHS Trusts</i>	<i>Sample logos from other manufacturers</i>
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I could create my logo in a number of ways:

- I could draw it by hand then scan it.
- I could use a basic drawing package such as Microsoft Paint
- I could use a desktop publishing package such as Microsoft Publisher, which has a logo creation facility.

I have decided to use word processing software with mail merge facilities, this will help the staff to create a standard wage slip then merge the relevant information for each member of staff.

There are a number of ways

- I can store the information to be used for the payslips;
- I can use a database such as Microsoft Access or the data editor in Microsoft Word.

However a spreadsheet such as Microsoft Excel is for me the best option as it has database features and also has the ability of being able to perform calculations and charts much more effectively than the others.

There are many ways of carrying out this sort of task but I feel that this will help the Senior Office Administrator not only with the production of payslips but also the calculation of wages, hours of work and overtime. The system should be reasonably easy to use and in theory could be enhanced to perform a wider range of functions.

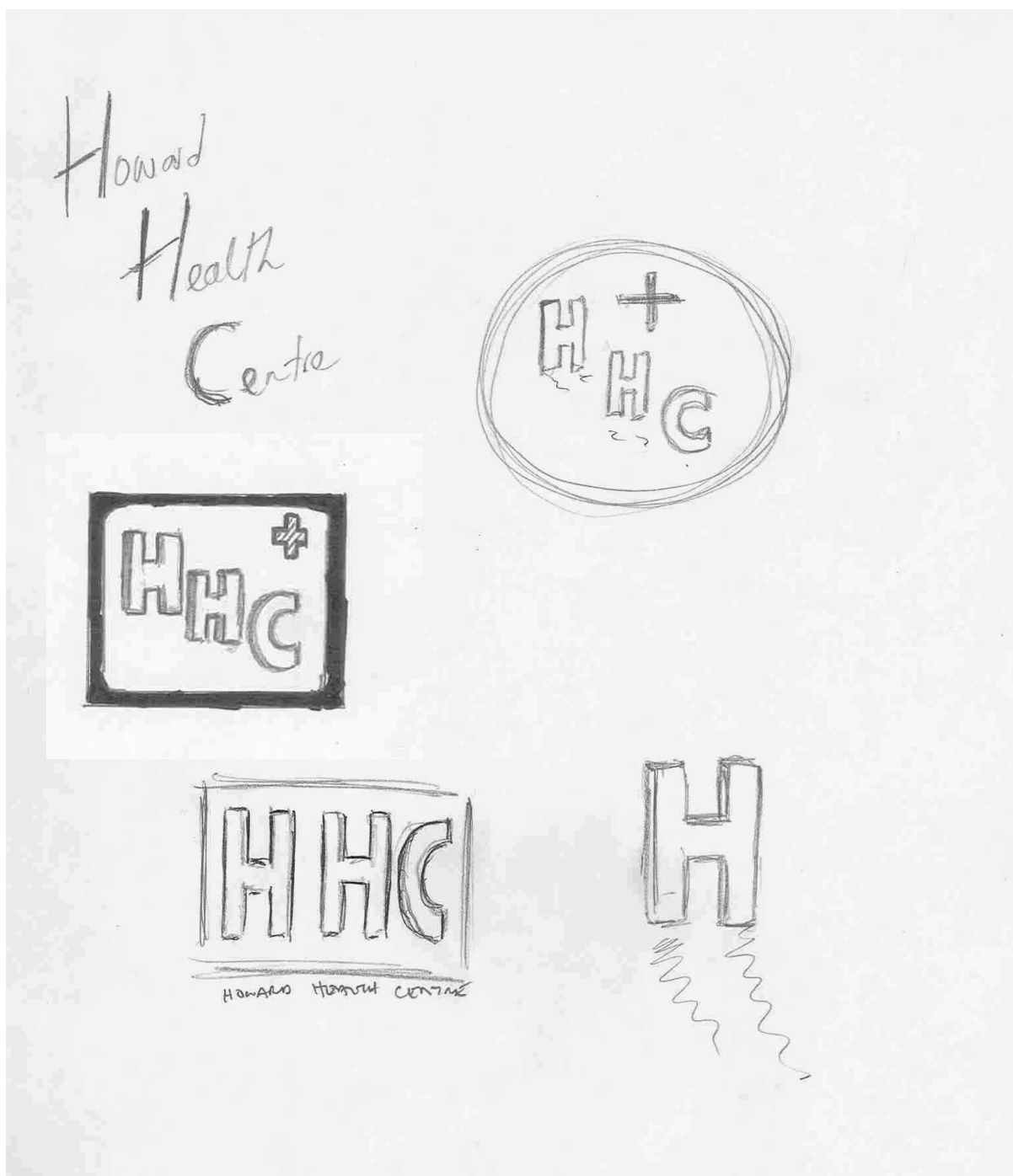
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## Example Task 2 – Design and creation of the health centre logo

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### ROUGH DESIGNS

*This page will contain the candidate's design thoughts and ideas for the health centre logo and the slogan.*



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## Example Task 2 – Design and creation of the health centre logo

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### PRINTED DESIGN

*This page will contain the candidate's printed design for the company logo.*





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## Example Task 2 – Design and creation of the health centre logo

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### TASK EVALUATION SHEET

*A sample evaluation sheet for Task 2 – Design and Creation of the Health Centre Logo.*

<b>HOW DID YOU CREATE YOUR LOGO?</b>
<b>WHAT HARDWARE DID YOU USE?</b>
<b>WHAT SOFTWARE DID YOU USE?</b>
<b>SUGGEST AN ALTERNATIVE METHOD FOR COMPLETING THE TASK</b>
<b>WHAT OTHER HARDWARE OR SOFTWARE COULD YOU HAVE USED?</b>
<b>HOW WELL DID THIS TASK WORK?</b>

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## Example Task 3 – Design and creation of a spreadsheet

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### CREATING THE DATA CAPTURE FORM FOR THE SPREADSHEET

*This page will contain the candidate's data capture form for the spreadsheet.*

<b>Name</b>	
<b>Post</b>	
<b>Full/ Part time</b>	
<b>Hours worked</b>	
<b>Rate/ hour</b>	
<b>Annual salary</b>	
<b>Payroll number</b>	
<b>Tax code</b>	
<b>National Insurance</b>	

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## Example Task 3 – Design and creation of a spreadsheet

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### GATHERING THE DATA

*This page will show the data collected using the data capture form.*

#### Staff List

Name	Post	Full / part time	Hours worked	Rate/ hour	Annual salary
Karen McDonald	Doctor	FT	46		£ 68,000
Satnam Singh	Doctor	FT	46		£ 68,000
James Brown	Doctor	FT	46		£ 68,000
Sangit Singh	Locum Doctor	PT	24		£ 18,000
Mary Taylor	Nurse	PT	20	£ 6.50	
Sara Chung	Nurse	PT	20	£ 6.50	
Sally Johnson	Senior Administrator	FT	40	£ 8.95	
Janice Battersby	Doctors Receptionist	PT	20	£ 4.95	
Paula Adams	Doctors Receptionist	PT	20	£ 4.95	
Hayley Cropper	Doctors Receptionist	PT	12	£ 4.95	
Sam Corbett	Call Out Driver	PT	12	£ 6.95	
Dean Gray	Call Out Driver	PT	12	£ 6.95	
Richard Satterthwaite	Call Out Driver	PT	12	£ 6.95	
Pooja Nahar	Call Out Driver	PT	12	£ 5.50	
Sam Bordoli	Call Out Driver	PT	12	£ 5.50	
Nicola Guy	Repeat Prescription Receptionist	FT	40	£ 5.50	
Bea Smith	Cleaner	PT	10	£ 4.50	
Mathilde Simon	Cleaner	PT	10	£ 4.50	
Samantha Corbett	Cleaner	PT	10	£ 4.50	
Rose Payne	Cleaner	PT	10	£ 4.50	
Laura Johnson	Cleaner	PT	10	£ 4.50	
Ben Smith	Caretaker/Security	FT	32	£ 4.50	£ 16,000

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## Example Task 3 – Design and creation of a spreadsheet

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### TASK EVALUATION SHEET

*A sample evaluation sheet for Task 3 – Design and Creation of a Spreadsheet.*



<b>HOW DID YOU GATHER THE DATA?</b>
<b>WHAT HARDWARE AND SOFTWARE DID YOU USE?</b>
<b>EXPLAIN THE FORMULAE YOU USED</b>
<b>SUGGEST AN ALTERNATIVE METHOD FOR COMPLETING THE TASK</b>
<b>WHAT OTHER HARDWARE OR SOFTWARE COULD YOU HAVE USED?</b>
<b>HOW WELL DID THIS TASK WORK?</b>

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## Example Task 4/5 – Design and creation of a wageslip Inserting the merge fields for a mailmerge

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*This wage slip would be designed using the candidate's own research.*

		<b>Howard Health Centre</b>		
<b>Name</b>		<b>Post</b>		<b>Payment for Week Ending: 31<sup>st</sup> July 2005</b>
«Staff_Name»		«Position»		
<b>Hours Worked</b>		<b>Overtime</b>		<b>Net Pay</b>
«Worked_Hours»		«Overtime»		
<b>Gross Pay</b>	<b>Income Tax</b>	<b>National Insurance</b>		
«Gross_Pay»	«Income_Tax»	«National_Insurance»		«Net_Pay»

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## Example Task 4/5 – Design and creation of a wageslip Inserting the merge fields for a mailmerge

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### TASK EVALUATION SHEET

*A sample evaluation sheet for Task 4 – Design and Creation of a Wageslip.*

<b>HOW DID YOU CREATE THE WAGESLIP?</b>
<b>WHAT HARDWARE AND SOFTWARE DID YOU USE?</b>
<b>EXPLAIN HOW AND WHY YOU INSERTED THE MERGED FIELDS</b>
<b>SUGGEST AN ALTERNATIVE METHOD FOR COMPLETING THE TASK</b>
<b>WHAT OTHER HARDWARE OR SOFTWARE COULD YOU HAVE USED?</b>
<b>HOW WELL DID THIS TASK WORK?</b>

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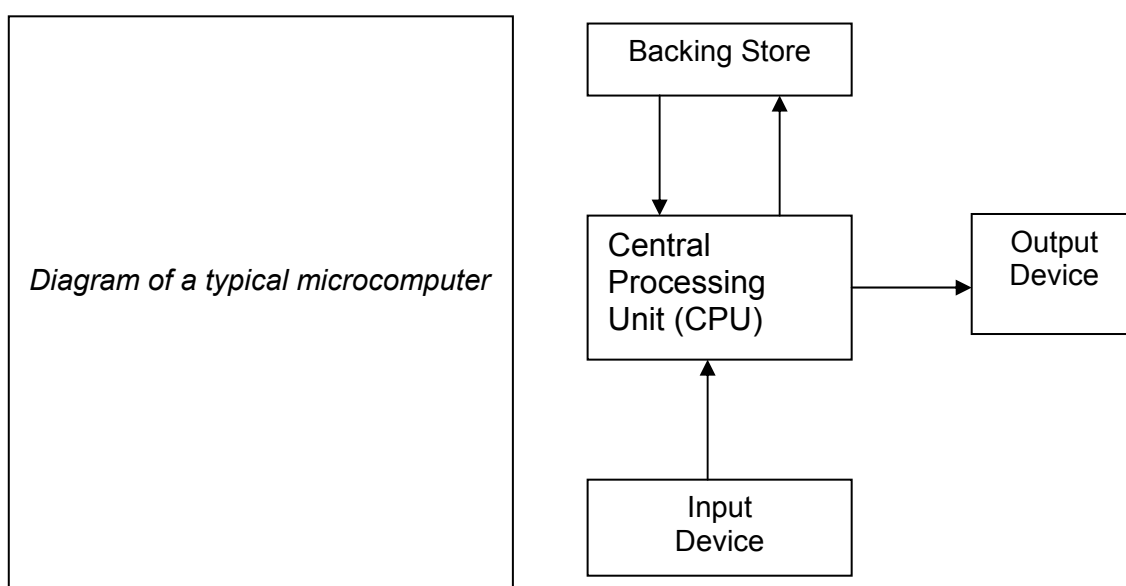
## Example Task 6 – Writing the reports

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### SOME EXAMPLES OF REPORTS

#### Hardware

There are two parts to all computer systems: the hardware and the software. Hardware is the term used for all of the parts of a system you can touch or handle. This will include the keyboard, mice, printers, scanners, monitors and storage devices such as disk drives and CD/DVD Rom. A typical PC set up may look like the following:



The hardware that is available for me to do this task is a network of RM PC5133 Accelerator Workstations. Each station has 64 megabytes of RAM memory, a 133-megahertz Intel processor and a 700-megabyte hard disk. Attached to this is a standard QWERTY keyboard a 2 Button Mouse and a 14-inch colour monitor. The network in this room is connected to a Brother 1450 laser printer. Each station has a set of headphones to allow me to listen to sound and music files. As a user of the network I have been allocated 5 megabytes of disk space to save my files to.

The hardware I have used, although basic by today's standards, was more than adequate for this task. Newer systems will have faster processing speeds such as the Intel Pentium running at 2.2 gigahertz, larger memory of 512 megabytes, bigger hard disk capacity now up to 100 gigabytes, larger monitors 17, 19 or even 21 inch, and the new type mouse with the scroll wheel, this is good for scrolling up and down large documents or browsing web pages or sites. The printer in this room is a laser printer and gives very good quality black only print. Colour can be better for presentation if I could have had access to a colour printer as this would have made the company logo stand out more. However, colour printing can be slower and is more expensive compared to laser printing.

## Software

Software is the general name given to all of the programs that can be run on computer hardware. There are two main categories of software: Operating or System Software and Application Software.

The operating software that was available to me on the network was Windows NT4 and this had the Windows 98 interface. This operating system basically controls the hardware and software. It does things such as manage the files, control the hard, floppy and CD Rom drives, also the mouse and the printers.

The Windows 98 desktop is what is known as a GUI or a Graphical User Interface as it uses graphics or icons that are used for commanding the computer to perform tasks. This is good for allowing me to open and manage applications I can place regularly used icons on my desktop and it helps me to organise my files into different folders for different subjects.

To create the system I have available to me a good range of application software these include Microsoft Office 2000. This is a suite of programs that includes:

- Word, a word processing package
- Excel, a spreadsheet that also has database functions
- Access, a relational database
- Publisher, a desktop publishing package
- PowerPoint which is a presentation package.

This is an excellent package of programs with a huge range of features that are all compatible with each other. This is very good for sharing data and information.

## Creating The Logo

To create the logo I used Microsoft Paint. This is a basic drawing package which has features such as line draw, fill, shading etc. This allowed me to create my logo. I feel that the logo was attractive and eye catching and it was a good representation for a health centre.

## Creating The Spreadsheet

I used Microsoft Excel. This is a very powerful spreadsheet, which has good database functions. It is very compatible with Microsoft Word and can be used when I wish to carry out the mail merge. The spreadsheet allows me to enter text, numbers, currency and dates. It has functions such as sort for putting data into specific order and a filter function to search for specific information.

Excel was very useful as I could add formulas and functions to carry out the calculations required for each worker's wage and the graph facility is good for representing information other than in written form. Although other software such as Access could have been used it was not as versatile for performing these calculations and graphs.



## Creating The Standard Pay Slip

I used Microsoft Word for this task. It is an excellent word processing package and has a huge range of features such as tables, Word art, clipart, borders and shading, columns, bullet points and of course a very versatile mail merge facility.

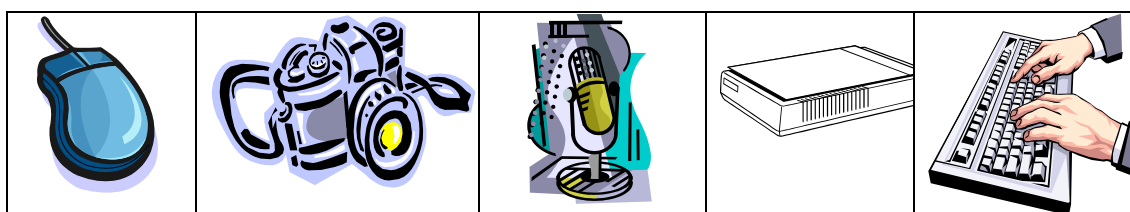
I could have used Microsoft Publisher which is a desktop publishing package. This also has very good design features but the mail merge facility is not as good or easy to use and it will not allow you to do complex searches which allow you to look for very specific data.

## Inputting Data

When designing any information system, I need first to consider what information I want to get out of the system. The output depends on the type of job (application). If I were considering a very basic system I could decide to use a visual display unit (VDU) and a printer for the output. For the input I would use a keyboard. This is only one solution. I should look at other alternatives so that I am able to choose the best one.

Input devices are used to get data into a system. The ideal input device would be able to get data into a system as accurately as possible, in the least amount of time and preferably without human intervention. The device would also be relatively cheap. Unfortunately, no perfect input device is available and the choice is always a compromise. The fastest input devices are suitable only for a narrow range of applications. Here are some of the main input devices in use today.

<b>Keyboard</b>	<b>Web Camera</b>	<b>Tracker ball</b>	<b>Mouse</b>
<b>Joy Stick</b>	<b>Light Pen</b>	<b>Touch Screen</b>	<b>Barcode Readers</b>
<b>Magnetic Strip</b>	<b>OCR/OMR</b>	<b>MICR</b>	<b>Microphone</b>
<b>Scanner</b>	<b>Digital Camera</b>	<b>Touch Sensitive Pad</b>	



The input devices available to me are keyboard and a 2-button mouse.

**The keyboard:** is the oldest and most familiar of all input devices. Keyboards are intelligent devices and contain their own chips. Basically each key acts as a switch that closes when the key is pressed. The micro-processor scans the keyboard hundreds of times a second to see if a key has been pressed; if it has, a code that depends on which key has been pressed is sent to the processing unit. The CPU translates this code into an ASCII code (the code that computers use to represent characters on the computer keyboard), which is then used by the computer program. A standard keyboard is called a QWERTY keyboard because of the arrangement of the letters of the top row of the alphabet keys.

As an input device the keyboard has to be one of the least efficient methods of entering data. Depending upon the operator's skills inputting information can be very slow and can be the main cause of the 2 most common types of error:

**The Transcription Error:** These usually occur due to misreading or the mistyping of data. This can be caused by poor handwriting or the confusion between characters i.e. the letter S and the number 5 or the letter O and the number 0.

**The Transposition Error:** This occurs when 2 letters or numbers are reversed for example to becomes ot or more commonly numbers are transposed i.e. 2142 may become 2412. Research has shown that 70% of errors that occur in data entry are transposition errors.

Most software today have tools such as spelling and grammar checking which will identify some errors but proof reading and double checking are the best way to ensure data from a keyboard is entered correctly.

**A Mouse:** is the input device that translates its movements on the desktop into digital information; this is fed to the computer, which in turn causes the cursor to move on the screen. Underneath the mouse is a ball that rotates as the mouse is moved on the desk, and sensors pick up the movement. Mice usually have 2 buttons to make selections or invoke menus and a wheel that can be used to scroll up and down pages.

**Candidates should additionally discuss and compare some of the other input devices listed above and relate these to their project. Areas of speed, validation and accuracy must be considered.**

## Output

Output devices provide results in a suitable form after data processing. In most cases this will be in the form of a printout or displayed on the computer screen. This can be in the form of pages or in an animated presentation. The widespread use of electronic mail means that output is now in the form of an electronic message which can be sent to other computers.

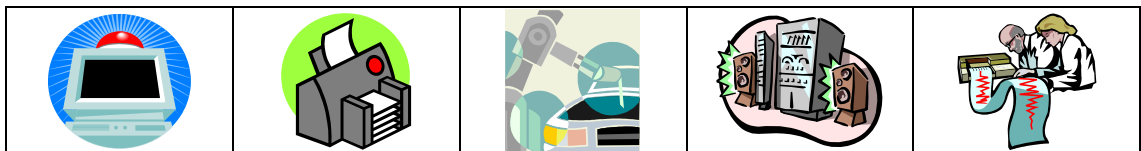
There is a range of output devices available today, these include:

**Visual Display Unit (Monitor)**  
**Voice Output**

**Robots**

**Laser Printers**  
**Electrical Signal**

**Inkjet Printers**



Within this classroom I have the following output devices available to me: A 14-inch colour monitor, and a Brother laser printer. A larger monitor of 17 or even 19 inch would be better as it will display more information. The laser printer gives very good quality black only print. For the production of employee payslips back and white is suitable, also, colour printing can be slower and is more expensive compared to laser printing especially if a company has a high number of employees.

**Candidates should discuss and compare some of the other output devices listed above. They must comment on alternative output and drawbacks.**

## Documentation

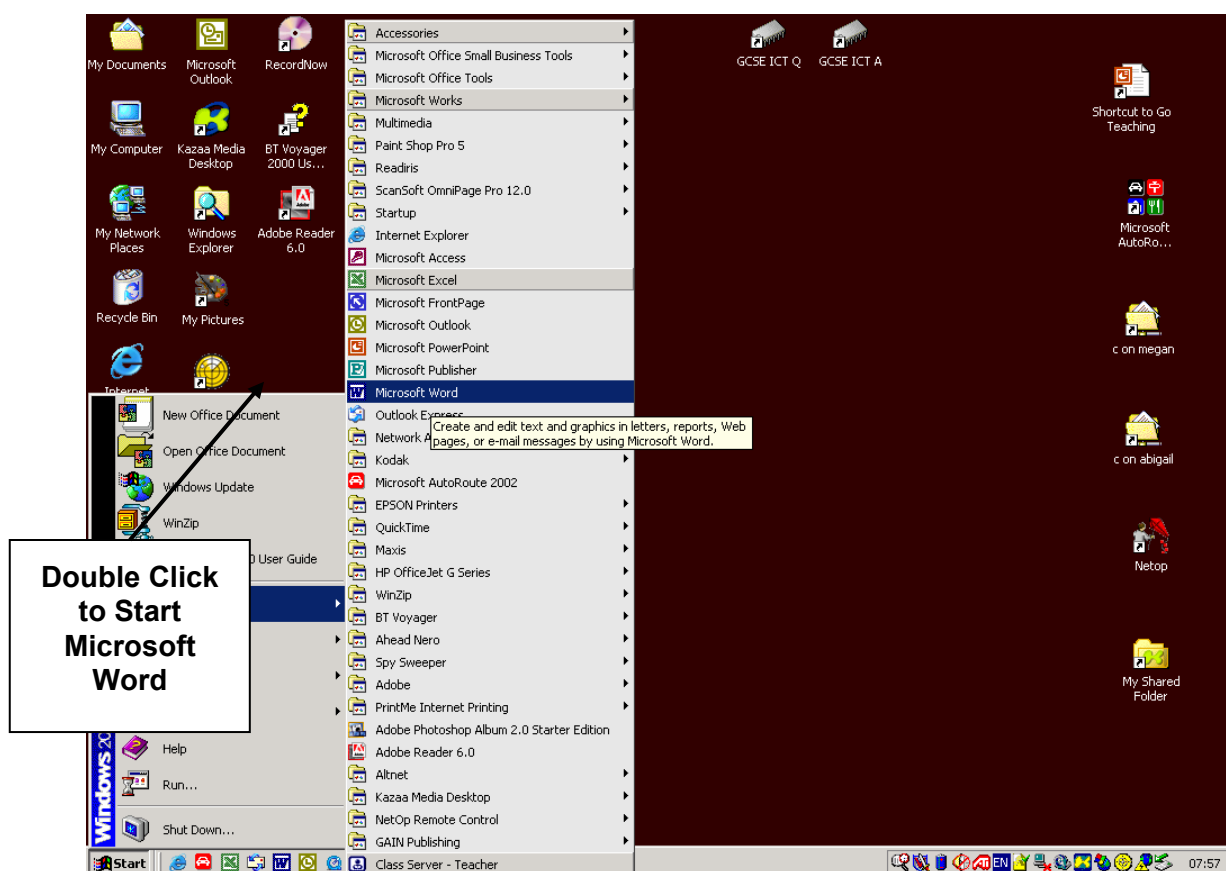
There are two types of documentation **User** and **Technical**.

**Technical Documentation** is used to explain a system to a specialist i.e. a programmer or systems analyst. The guide will use specialist or technical terms. This will be used when the system is upgraded or if a new member of technical staff needs to understand the current system.

**User Documentation** is a manual or a set of instructions that a user, such as a member of the office staff, can turn to for learning new procedures or to deal with a problem that may arise. Good documentation should include the following:

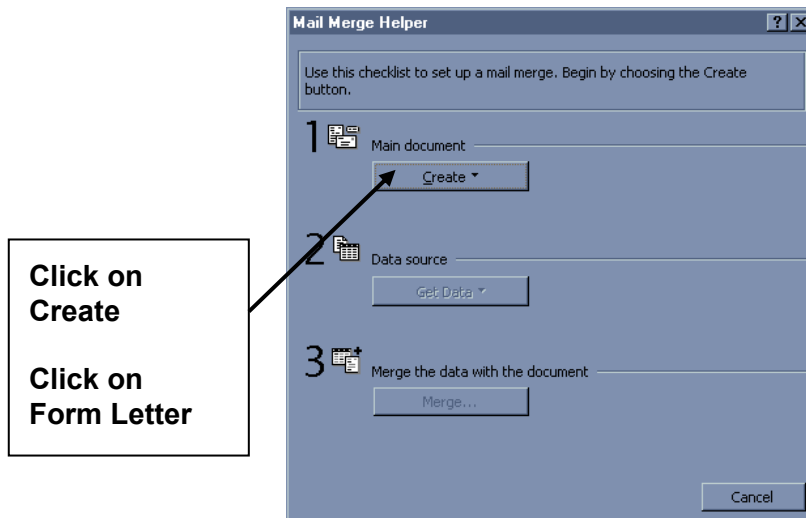
- Step-by-step instructions with examples, using screen dumps
- How to load the software
- How to perform functions
- How to save and print
- Exercises to allow the user to practice and understand the system
- What to do if problems occur such as not printing or saving

The user guide I have produced works quite well and someone who has knowledge of a similar type of system would be able to use it using these instructions. However, I could have made it a lot better by including screen shots so a user can see if they are on the correct track. For example



Click on Tools, then Mail Merge.

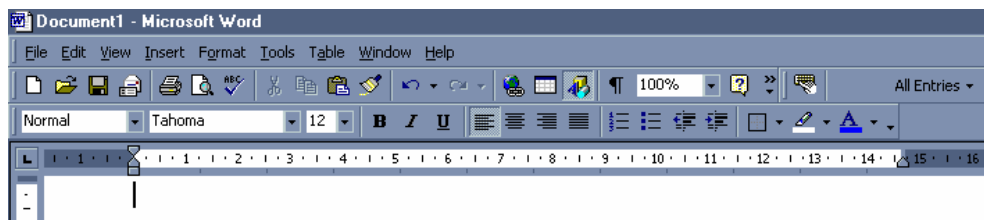
This will take you to the Mail Merge Helper:



This is a very effective way of showing users how to use the system and carry out tasks.

I could have added small exercises to remind the user how to perform basic functions such as:

Which icons on the toolbar, below, are used to save and print your work?



## Testing and refinement

My user documentation does not have a trouble-shooting guide. This is a section which helps the user to overcome any common problems which may occur, for example:

PROBLEM	POSSIBLE SOLUTION
My wage slip has not printed	Check the printer is: Connected, switched on, on line and that there is paper in.

If the user cannot rectify simple problems like the one above then there should be a name or contact number to allow the user to gain further technical assistance.

## **Training For New Working Practices**

It is very unlikely that any new system would be introduced without some form of staff training. This could be done “In House” where training officers will come to the user and teach them how to use the system individually. Staff from a number of the health centres may go to a regional NHS office or possibly a training agency to be taught as a group. Each method has its benefits in terms of time, cost, effectiveness and the sharing of skills and ideas. The documentation would be used as a reference for the new user until he or she is totally familiar with the new system.

## **HOW HAS THE USE OF ICT BENEFITED MY SYSTEM?**

### **The Manual Method**

I did not have to use any form of computer or ICT equipment to do this task, as it could have all been done by hand. To do this I would take a piece of paper and pencil and draw the company logo and either by freehand, or with the use of stencils I could have written out all of the information required and then included all the personal details.

To keep a track of the staff wages and production situation I could have used a card for each position. This would keep all of the job details including: Shift times and rates of pay etc. I could use a calculator to calculate pay, tax and national insurance etc.

This manual system would be very time consuming considering the staff wages need to be recalculated on a regular basis.

### **The Benefits of ICT**

The use of ICT is of great benefit for this type of system as once the details are created for the first time they can be used over and over again. This can be done by saving the original spreadsheet and payslip template then recalling it each time it has to be used.

The spreadsheet and payslip can be updated easily by adding, removing or changing information. No need to start all over again each time a week, no need for a rubber or correction fluid if you make a mistake or want to delete information. I have the use of tools such as spelling or grammar checking, I can easily experiment with different size and shape of typeface, I can use colour, clipart, borders, word-art, tables and frames to make the payslip easier to read.

By using a spreadsheet, similar features as above can be used for adding, changing and deleting information. The use of formulas helps with calculations these are redone automatically each time worker’s details might change. Spreadsheets are used as modelling tools to make predictions. For example, a manager could see the overall cost of the health centre staffing. If a manager had to make a report about these predictions he or she could use the chart functions within the spreadsheet to create a graphical of view of these situations.

ICT has made great steps in the communication of information files can be sent and received by e-mail instantaneously. Data can be passed around a network for other users to access or the system could be placed on a disk or CD-ROM and used to keep safe or to pass to other places or sites.

## The Disadvantages of ICT

The use of ICT has revolutionised working practice and many organisations would not be able to do what they now do, or offer, without the use of ICT. However, the use of ICT does have its disadvantages:

- Computers need electricity to power them, so power cuts can halt work.
- Computers have the tendency to “crash” or lock up, and data is lost if it is not saved.
- Data can be lost if disks or files get damaged or corrupted.
- Data can be changed or deleted easily or accidentally without trace.
- Viruses are becoming an increasing source of data corruption.
- Accessibility and the sharing of data electronically can make information less secure.
- Certain files are only compatible with certain software.
- Staff need to be computer literate or be trained to use computers.

## Appraising My System

The system I have designed does work and will be an effective tool for the person having to carry out this sort of task. This system can certainly be expanded upon in the following areas:

- The spreadsheet could be used to store more information such as the members of staff doing the job currently. Their responsibilities or duties etc.
- Further formulae or functions could be used to calculate deductions such as income tax and national insurance.
- Separate worksheets could be used to keep a track of the staffs’ attendance and punctuality. This could be used for producing letters giving positive or negative feedback to the employees.
- Graphs can be produced to show information for reports or presentations.

Once the data is set up on the spreadsheet it would be easy to create other standard letters, or even advice leaflets, using the mail merge method.

## USE OF ICT IN THE WIDER WORLD

Computers have, and will continue to revolutionise every aspect of our day-to-day living. If you try to imagine life without ICT and the benefits it has brought you would need to go back to the time before the Industrial Revolution when mankind did every task by hand with the help of animals and the tools that he had to make himself.

The use of ICT has made massive improvements to our lives, and has done a lot of good for mankind. However, the use of ICT does have its downside.

In this report I am going to look at the positive and negative effects of ICT in view of its social, economic, legal and moral implications.

Socially, the use of ICT has brought great advances within the world of communications. It is now possible to contact friends and relatives all over the world using land or mobile telephone, SMS or text messages, email, in chat rooms or with the use of video conferencing. It can be said that the use of new communications allows us to stay in touch very easily.

It is possible for many of us to gain access to information. Instead of going to libraries we can use interactive CD-ROMS or we can access the Internet. Adults and children can learn on-line and be assessed on what they have learned, then receive their qualifications. It is possible to shop on-line now, not just for clothes and electrical goods but also for the weekly food shopping.

With the advent of satellite television for sports and movies, video, DVD and computer games consoles people can receive all of the entertainment they want. Tele-working now allows employees to work from home using computers linked to the Internet. So now it is possible to carry out your whole life, virtually, without leaving the house.

Modern technology has made vast improvements in the community with its use in the Police Force for the prevention and detection of crime. Information about all known criminals and offences in Britain can be accessed from a computer in any Police station. Computers are used for fingerprint identification, matching DNA and examining other evidence collected from a crime scene. This makes the job of the detectives much easier and more crimes are solved and at greater speed. Closed Circuit Television (CCTV) is now used in most city centres and in many local communities for the protection of people and properties. CCTV helps to deter crime and helps with the identification and capture of criminals.

The use of ICT has brought huge developments in medicine without the use of computers advances in the treatment of terminal illness would not have been made. The development of drugs for the treatment of illness may not have been possible. New operating techniques would not be possible. The use of ICT for all of the above has saved and improved the quality of life of people who become ill.

The use of ICT has made it possible to change the way plants and animals grow and develop. Computers allow us to genetically modify things and cloning or duplicating is now possible. At the moment it is illegal in Britain to carry out genetic engineering and cloning on humans.

The use of ICT has revolutionised the way we work. Most organisations and businesses would not be able to function at all if it were not for the use of computers. Computers can make life so much easier and quicker, which means that less staff are required. Robots can do the work of people in manufacturing industries such as car production.

Companies have found that the use of systems such as the one I have created greatly reduce the amount of work which they have to carry out. I feel that there would be very little difference between my system and a commercial one and feel that it could be used very easily in any organisation that have a large staff turnover.