



General Certificate of Secondary Education

Information and Communication Technology 3522 *Specification B*

3522/F Full Course Foundation Tier

Mark Scheme

2006 examination – June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

3522/F - Foundation Tier Written Paper

1.												
a.												
i)	This point. Spelling check	1 mark										
ii)	Any reasonable, for example. Highlight 2 of the 't's + cut/delete, 1+1 Right click on the error + select the correct spelling, 1+1 Position the cursor to the left of the 't's + press the delete key 2 times NOT do a spelling check	2 marks										
iii)	This point. Bullets	1 mark										
iv)	These points. Word-wrap ensures that you only have to press the <RETURN> key at the end of a paragraph. A page number can be printed at the bottom of every page in the footer. You can use clip art to illustrate the text.	3 marks										
b.	These points in this order. save - allow upper case and lower case combinations and misspellings CD-R – allow CDR and lower case	2 marks										
c.	These points. All in order, 2m 3 in order, 1m Correct order is:	2 marks										
<table border="1"> <thead> <tr> <th>Label</th> <th>Operation</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Highlight the bar chart in the spreadsheet</td> </tr> <tr> <td>D</td> <td>Copy the bar chart</td> </tr> <tr> <td>C</td> <td>Position the cursor in the word processor document</td> </tr> <tr> <td>A</td> <td>Paste the bar chart</td> </tr> </tbody> </table>		Label	Operation	B	Highlight the bar chart in the spreadsheet	D	Copy the bar chart	C	Position the cursor in the word processor document	A	Paste the bar chart	
Label	Operation											
B	Highlight the bar chart in the spreadsheet											
D	Copy the bar chart											
C	Position the cursor in the word processor document											
A	Paste the bar chart											
d.												
i)	This point. .Name = "Arial" Allow upper or lower case combinations and misspellings.	1 mark										
ii)	This point. .Size = 20	1 mark										
iii)	These points. .Bold = False .Italic = True Allow upper or lower case combinations and misspellings.	2 marks										
Total		15 marks										

2.		
a.	These points. Scanner; Mouse; Digital Camera	3 marks
b.	These points. Monitor; Printer ; Speakers	3 marks
c.	These points. A PDA is a portable, handheld hardware device that can fit in your pocket. Input to a PDA is using a touch screen. PDAs can have e-mail, word processing and spreadsheet software.	3 marks
d.		
i)	These points. To keep track of lessons and appointments. To keep a list of tasks that need doing, such as homework. To find the telephone number of a friend.	3 marks
ii)	Any reasonable, for example: Play games. Listen to music. Access the web. Use mapping software to find their way. Use as a remote control handset. Read a book. NOT: send email, wordprocessing, spreadsheets, calendar, tasks, and store telephone numbers as these have previously been mentioned.	2 marks
iii)	Any reasonable, for example: The information could be lost if the battery runs out. A PDA can be easily lost and all the information goes with it. NOT can lose it easily.	1 mark
	Total	15 marks

3.		
a.		
i)	These points in this order C7 - Allow upper or lower case Highlight - Allow upper or lower case combinations and misspellings.	2 marks
ii)	This point. Allow a number between 0 and 50.	1 mark
b.	These points in any order. C10 and C11 Allow upper or lower case If more than 2 cell references are given, -1 for each incorrect	2 marks
c.	These points. Website address; Formula; Picture	3 marks
d.	These points. An index to help the mechanic find the information needed. A tutorial guide to help the mechanic use the spreadsheet. A search engine to help the mechanic find the information needed.	3 marks
e.		
i)	These points. All in order, 2m Any 3 in order, 1m Correct order is: C B D A	2 marks
ii)	Any reasonable, for example: The cost of postage would be less from the UK. Parts for the car being serviced are more likely to be available in the UK.	1 mark
f.	Any reasonable, for example: It does not give the mechanic a clear idea of who will pay and who will not.	1 mark
	Total	15 marks

4.		
a.		
i)	These points. The printed e-mail would not be as readable as a large poster with large print. A poster with colours and pictures would be more attractive than the e-mail.	2 marks
ii)	These points The trip starts in Settle. There is a special offer return price. The train is a steam train.	3 marks
b.		
i)	This point. DTP (Desk Top Publishing)	1 mark
ii)	Any reasonable, for example: Better control over page layout. Wizards to help with poster design.	1 mark
c.		
i)	These points. Pictures are more attractive when printed in several colours. Posters have more impact when printed on very large sheets of paper.	2 marks
ii)	These points. Use an A2 colour printer attached to the network. Send the poster by e-mail to a specialist company that prints posters.	2 marks
d.		
i)	These points. The poster is too large to fit on a floppy disk. One of the computers does not have a floppy disk drive.	2 marks
ii)	Any reasonable, for example: Zip disk, CD-R, flash memory stick or equivalents e.g. pen drive, memory card Allow: PDA, iPod Allow hard disk if it is clear that this is removable or transportable. NOT floppy disk, CD-ROM	2 marks
	Total	15 marks

5.		
a.	These points. The driver's name. The car's registration number. How to contact the driver.	3 marks
b.	This point. Personal data must be relevant to the purpose for which it is collected.	1 mark
c.	These points. Relevant title and/or explanation of purpose of questionnaire, 1m Has provision to enter the driver's name; the car's registration number; and how to contact the driver, 1m. Other relevant field, e.g. date of birth, staff or student, 1m, NOT gender, age Uses character boxes or similar to aid accurate data entry, 1m Uses tick boxes or similar to aid accurate data entry, 1m Uses any other technique to aid accurate data entry, 1m Signed and dated, 1m	4 marks
d.	This point. Visual verification	1 mark
e.	These points. All in order, 2m Any 3 in order, 1m Correct order is: C D B A	2 marks
f.	These points. The database can be sent to another secretary as an e-mail attachment. The car's registration number would be used as a key field in the database.	2 marks
g.		
i)	Any reasonable reason for, for example: As the school already uses a computer for school administration, it is easier to do this than use a paper based system. The information is stored securely as it is backed up as part of routine housekeeping procedures. The list is more private as it is not pinned on the notice board in the school office.	1 mark
ii)	Any reasonable reason against, for example: If there is not an existing computer that can be used for this application, the volume of data does not justify the expense of buying a new computer. It may be faster to look at a short list on a piece of paper than access the database. You do not need to know how to use a database if you keep the information on a piece of paper.	1 mark
	Total	15 marks

6.		
a.	<p>These points.</p> <p>The ICT system adds one to the total when a person enters.</p> <p>The ICT system subtracts one from the total when a person leaves.</p> <p>The total is set to zero before people are admitted.</p>	3 marks
b.	<p>This point.</p> <p>The maximum number of people that can be admitted, i.e. the capacity of the stadium</p> <p>Allow: how many seats there are; number of places/spaces</p>	1 mark
c.		
i)	<p>These points.</p> <p>People leave through 3m wide doors and cannot be counted accurately.</p> <p>The ICT system can only count those people who enter through turnstiles.</p> <p>People who have reserved seats do not attend.</p>	3 marks
ii)	<p>These points.</p> <p>Admit only one person into the stadium and check that the total has increased by 1.</p> <p>Manually count the number of people in the stadium and compare this with the total calculated by the ICT system.</p>	2 marks
d.		
i)	<p>This point.</p> <p>Writes down all of: Johnson, Patel and no others in any order.</p> <p>Allow upper or lower case combinations and misspellings.</p>	1 mark
ii)	<p>Any reasonable, for example:</p> <p>So that season ticket advertising can be sent to them.</p>	1 mark
iii)	<p>This point.</p> <p>Writes down all of: Wardak, Patel, Smith and no others in any order.</p> <p>Allow upper or lower case combinations and misspellings.</p>	1 mark
iv)	<p>Any reasonable, for example:</p> <p>Because the street and the town have not been separated in the address.</p> <p>Because Wardak lives in Leeds Gardens and this is not the city of Leeds.</p>	1 mark
v)	<p>This point.</p> <p>Writes down all of: Johnson, Wardak, Patel and no others in any order.</p> <p>Allow upper or lower case combinations and misspellings.</p>	1 mark
vi)	<p>This point.</p> <p>Writes down: Wardak and no others</p> <p>Allow upper or lower case combinations and misspellings.</p>	1 mark
	Total	15 marks

7.		
a.		
i)	<p>These points.</p> <p>Redevelop the car park at the back of the building to make it more difficult to get to the computer room windows.</p> <p>Put reflective security foil on the windows to stop people looking into the computer room, and to make it harder to break the windows.</p> <p>Make sure there is always a security guard in the foyer.</p>	3 marks
ii)	<p>Any reasonable, for example.</p> <p>Bolt or otherwise secure the computers to the desks.</p> <p>Block up the windows or fit metal security grills over them.</p> <p>Introduce double yellow lines to further restrict parking at the front of the building.</p> <p>Fit a burglar alarm in the computer room; BoD fit an alarm.</p> <p>Move the computer room from the ground floor.</p> <p>Control access to the computer room using swipe cards or coded locks.</p> <p>Use a swipe card operated lock; NOT lock the doors.</p> <p>Fit CCTV cameras; BoD fit a security camera; NOT use a camera.</p> <p>NOT a security guard or security foil in any location.</p>	3 marks
b.	<p>These points.</p> <p>Use a firewall to prevent unauthorised installation of viruses and other malicious software from the Web.</p> <p>Ensure users have an authorised username and password before allowing them to connect to the wireless LAN.</p> <p>Encrypt all the data on the wireless LAN.</p>	3 marks
c.	<p>These points.</p> <p>Star network topology; includes at least 3 computers and a file server; labels are not required, 1m</p> <p>Includes a networked printer, 1m</p> <p>Includes some feature that indicates possible web access, 1m</p> <p>Indicates in some way that the network is wireless, 1m</p> <p>Includes other reasonable features of a wireless LAN, 1m</p>	3 marks
d.	<p>These points.</p> <p>A 25 user software licence.</p> <p>A site licence.</p> <p>Freeware.</p>	3 marks
	Total	15 marks

8.		
a.		
i)	<p>These points.</p> <p>You tend not to vary your diet.</p> <p>You do not have to worry about buying the food you keep in the fridge.</p>	2 marks
ii)	<p>Any reasonable, for example.</p> <p>Housework changes because you do not have to make shopping lists and go to the shops as often.</p> <p>More van drivers are needed to deliver the goods.</p> <p>More supermarket staff are needed to pick the goods that have been ordered.</p> <p>NOT You do not have to worry about buying the food you keep in the fridge.</p> <p>NOT you tend not to vary your diet.</p>	1 mark
iii)	<p>Any reasonable, for example.</p> <p>People will not drive to the supermarket to shop which reduces car pollution.</p> <p>More delivery vans will be on the roads which increases congestion.</p>	1 mark
iv)	<p>Any reasonable advantage, for example.</p> <p>You can switch on the kettle and the cooker from work just before you go home.</p> <p>If you forgot to switch off the cooker, you can switch it off from work.</p> <p>If you lock yourself out of the house leaving a pan on the cooker, you can switch it off from a neighbour's house.</p> <p>Any reasonable disadvantage, for example.</p> <p>Your kitchen has to have extra wiring to each appliance.</p> <p>You need to subscribe to broadband.</p> <p>The appliances would probably cost more as they have more intelligence built in.</p> <p>Allow: Someone else could cause trouble for you by turning your appliances on and off remotely without you knowing.</p>	<p>4 marks</p> <p>2 adv</p> <p>2 disadv</p>
b.	<p>Any reasonable advantage, for example.</p> <p>You do not have to travel long distances to the shops.</p> <p>Goods are delivered to you.</p> <p>You have easy access to banking facilities without travelling.</p> <p>You can do your banking at any time rather than having to wait until you are able to travel into larger towns and cities.</p> <p>You have access to a much wider range of goods.</p> <p>You are not dependant on local shops stocking what you need.</p> <p>Helps the environment by using less petrol.</p> <p>Any reasonable disadvantage, for example.</p> <p>You may have to be at home when the goods are delivered.</p> <p>You cannot inspect the goods effectively as you only see pictures before delivery.</p> <p>If a criminal/hacker gets your credit card details they can buy goods on-line in your name.</p> <p>If a criminal/hacker gets the username and password for your on-line bank, they can transfer money out of your account.</p> <p>A criminal/hacker can get your personal details/steal your identity NOT someone can...</p> <p>Identity theft.</p> <p>Your opportunities to socialise will be reduced even more as you will not travel into larger towns and cities as often.</p>	<p>7 marks</p> <p>max 4 adv.</p> <p>max 4 disadv.</p>

	Village shops and services close down as they are used less often. You need Internet access to make use of these services. NOT you might get a virus.	
	Total	15 marks