



General Certificate of Secondary Education

Information and Communication Technology 3521 Full Course *Specification A*

3521/F Foundation Tier

Mark Scheme

2007 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.

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1	C	1 mark	Correct answer only
2	D	1 mark	Correct answer only
3	A	1 mark	Correct answer only
4	B	1 mark	Correct answer only
5	B	1 mark	Correct answer only

6 **NOT names or address that are already given**

Town/City/county count as repeats

Title at least 3 (or coded)

Postcode at least 7

(Or clear 3box gap 3 box)

Telephone number (day) at least 11

Telephone number (evening) at least 11

Contact tel. Number at least 11

Mobile tel. Number at least 11

NOTE MAX TWO TELEPHONE NUMBERS

Fax number at least 11

E-mail address at least 20 (sensible splits)/memo

Photo box to fit

Date of membership/expiry of membership at least 8(2-2-2/4)

(Type of) identification given at least 10

DOB at least 8(2-2-2/4)

Gender at least 6 (or coded)

Signature Memo

Signature (parents/carer/guardian) Memo

Date at least 8(2-2-2/4)

NB – could use the date at end of form

NOT NI - Not doctor, not doctor's address etc.

NOT age

Boxes only unless memo specified

[] – Open boxes are OK – boxes with small vertical lines are OK

but dashes are NOT/ just lines are not.

Memo = lines/dashes/large box/dots

IGNORE FILLING IN

Mark only the first 4 fields (Do not count first name, surname, address 1, address 2)

Ignore correct duplicate fields e.g. 3rd telephone number – these

do not count in the FOUR

Tick correct field name – do not penalise lack of capitals or spelling

Tick correct number of boxes/memo field for the corresponding field name.

Count ticks - divide by 2 - round down

MAX 4 marks

7 (a) Line spacing **1 mark Correct answer only**
 Centre **1 mark Correct answer only**

- (b)
- Picture/clipart added/graphic/image/logo
 - Text/font size made bigger/smaller/changed
 - Text font type e.g. Arial changed/Word art used
 - Text made bold/underline/italic/text style changed
- For text – allow words/writing
- Using bullet points/numbering/lists
 - Drawing tools/auto shape
 - Tables
 - Text boxes
 - Borders/Border Art
 - Columns/Tab
 - Shaded/pattern/watermark/colour text/ coloured background
 - Text wrapping
 - Text right/(fully) justify/indent/margins/alignment/rotation
- Change font – scores 1 mark (size or style are repeats)

Any 2 x 1 mark

(c) Spell Check
 Grammar Check **1 mark**

(d) Step 1 Highlight the second special offer
 Step 2 Cut **1 mark**

Step 3 Position the cursor just above the first special offer
 Step 4 Paste **1 mark**

(close variation but clearly correct)
Allow 1 mark – even if second mark is wrong

8 (a) Extra words will NOT gain one of the marks (think of it as marking all the work then - 1. Min ZERO). Allow FD or other abbreviations. Allow cm or degrees.

Clockwise solution

Forward 10 **1 mark** **Correct answer only**
 (or equivalent i.e. Forward 2 Forward 8)

Right 90
 Forward 1 **1 mark** **Correct answer only**

Right 90
 Forward 8 (allow equivalent)
 Right 90
 Forward 1 **1 mark** **Correct answer only**

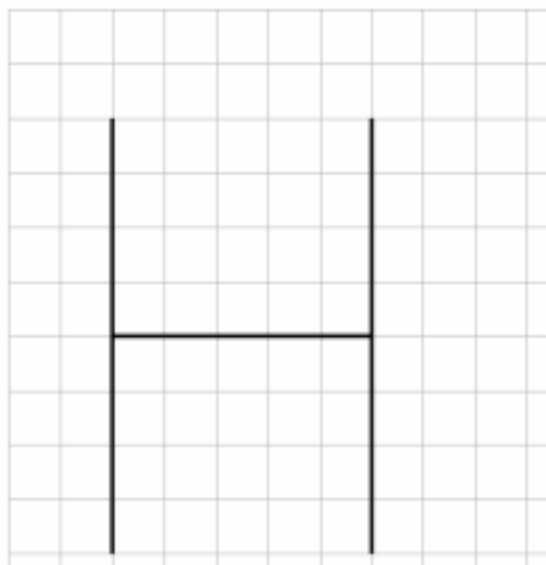
Anticlockwise solution

Forward 2 **1 mark** **Correct answer only**
 (or equivalent i.e. Forward 1 Forward 1)

Right 90
 Forward 1 **1 mark** **Correct answer only**

Left 90
 Forward 8 (allow equivalent)
 LEFT 90
 Forward 1
 Left 90
 Forward 8 (allow equivalent) **1 mark** **Correct answer only**

(b)



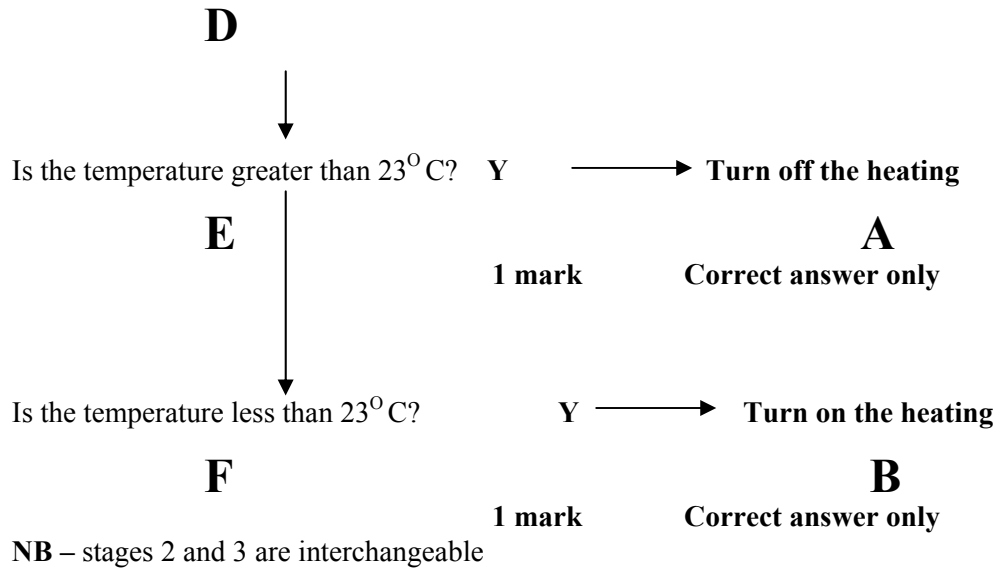
Correct 1st vertical line **1 mark**
(correct place and orientation)

Correct 1st horizontal line **1 mark**
(correct place and orientation)

Correct 2nd vertical line **1 mark**
(correct place and orientation)
 NB – if the second line is wrong. The third mark can still be given for the correct third line (even in the wrong position)

9	(a)	Manages data transfers to and from peripherals	1 mark	Correct answer only
		Provides a means of communication between applications software and the hardware	1 mark	Correct answer only
		Allocates memory for storing programs	1 mark	Correct answer only
	(b)	Multi-user	1 mark	Correct answer only
10	(a)	spreadsheet	1 mark	Correct answer only
	(b)	D12 (close variation but clearly correct)		1 mark
	(c)	= D8-D21	1 mark	Correct answer only
	(d)	Number/numeric/integer (close variation but clearly correct)		1 mark
	(e)	A virus may corrupt the information	1 mark	Correct answer only
11	(a)	(i) Sending the order to the supermarket from their PC	1 mark	Correct answer only
		(ii) the supermarket taking the money from their credit card	1 mark	Correct answer only
		(iii) a van from the supermarket delivering them to their house	1 mark	Correct answer only
	(b)	<p>Advantages</p> <ul style="list-style-type: none"> • Cheaper/quicker in the long run because..... <ul style="list-style-type: none"> ○ Saves lots of their time travelling there and doing the shopping ○ Saves money on petrol and putting mileage on the car/ bus fare • Do not have to leave the house/ order from comfort of their home • Can order them 24/7 not just when the supermarket is open • Use repeat orders to save time • Wider choice • Faster to search (on-line) • Home delivery <p>NOT just cheaper or faster</p>		Any 2 x 1 mark
	(c)	<p>Disadvantages</p> <ul style="list-style-type: none"> • Not feel a personal service/ cannot choose own groceries/ cannot see what you're getting/damaged • Virus issues/Hacking issues • Fear of buying due to credit card security would cut sales/fraud • Not everyone has access to/knows how to use Internet/computers /network down. <p>Arrives late/ does not arrive /wrong goods delivered/ have to wait for goods</p>		1 mark

12 (a) Read the temperature in the room **1 mark** **Correct answer only**



(b) Heat sensor/thermistor/thermostat/temperature sensor (not just sensor or thermometer) **1 mark**

(c) The temperature in each room may well be different /size of rooms may affect the temperature **1 mark**

(d) Every hour **1 mark** **correct answer only**

13 (a) **Sending a text message/attachment/file/picture**

Over a **communications network**
 LAN/WAN/Internet /WAP phone/between computers
NOT just electronic-mail

1 mark

(b) (i) The e-mail will usually arrive quicker than the post **1 mark** **Correct answer only**

- (ii) **Advantage compared with post**
- Same delivery time anywhere in the world
 - Free/cheaper to send than paying postage/send attachments at no extra cost.
 - Less chance of getting lost
 - Send to many people at the same time
 - Send when ready/immediately (not when post is collected)
 - Check e-mails from many places (World wide)
 - Don't have to leave the house to send it.
- NOT – does not need the receiver to be there** **1 mark**

	(iii)	Disadvantage compared with post		
		<ul style="list-style-type: none"> • Problems with computers are more common • Catch/send virus • Can't send parcel/bulky items • Need a computer/Internet/WAP phone etc. 		1 mark
14	(a)	(i)	input	1 mark Correct answer only
		(ii)	software	1 mark Correct answer only
		(iii)	it is reasonable	1 mark Correct answer only
	(b)		presence check	1 mark Correct answer only
	(c)		make sure the mark is less than or equal to 100 (or similar) make sure the mark is greater than or equal to 0 (or similar) between max/min upper/lower limit	1 mark
			if mark is not within the range an error is signalled	1 mark
15	(a)	(i)	The driver would not be in any danger using a simulator	1 mark Correct answer only
			Road and weather conditions on the simulator can be changed as needed	1 mark Correct answer only
		(ii)	The distance taken to stop will vary with weather conditions	1 mark Correct answer only
	(b)		Spreadsheet	1 mark Correct answer only
	(c)		Changing a variable or variables within the model	
			Looking at/analysing the results of these changes	
			Make decisions/predictions/more changes as a result of the analysis	
			The process is often cyclic/repeated	Any 2 x 1 mark
16	(a)		Information must not be excessive for the purpose	1 mark Correct answer only
			Information must not be transferred to countries outside the European Union	1 mark Correct answer only
			Information must be obtained fairly/lawfully	1 mark Correct answer only
	(b)	(i)	5	1 mark Correct answer only
		(ii)	ID Number (close variation but clearly correct)	1 mark

	(iii)	A key field must be unique in a database table	1 mark	Correct answer only
	(c)	Video/film/products/stock table Supplier table Orders/rentals/sales table		1 mark
	(d)	Avoids duplication of data/redundant data within tables Less data entry so less time and less likely to make errors Can produce report/select fields/take fields from each/more than one of the tables of the each of the tables		1 mark
17	(a)	(i) Immediate feedback of information	1 mark	Correct answer only
		(ii) Questionnaires are often not completed	1 mark	Correct answer only
		(iii) Can see what is actually happening/not subjective Can watch "it" a number of times Not prone to staff exaggeration/lies		1 mark
	(b)	(i) Design ("2 nd stage")	1 mark	Correct answer only
		(ii) Evaluation ("5 th /last stage")	1 mark	Correct answer only
		(iii) Testing ("4 th stage")	1 mark	Correct answer only
18		back-up copy mail-merging MICR (close variation but clearly correct)		1 mark 1 mark 1 mark
19	(a)	Menu driven	1 mark	Correct answer only
	(b)	Consistency of layout	1 mark	Correct answer only
	(c)	(use of) colour (use of) sound (use of) images/pictures/graphics position of items on screen/easy to navigate help facilities house style/user friendly NOT easy to use.		Any 2 x 1 mark