



**General Certificate of Secondary Education
June 2010**

**Information and Communication Technology
3527 Short Course**

Specification A

3527/F Foundation Tier

Final

Mark Scheme

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	(a)	(i)	Keyboard		Correct answer only	1
1	(a)	(ii)	F (Scanner)		Correct answer only	1
1	(a)	(iii)	graphics digitiser OCR OMR	concept Keyboard light Pen mouse/rollerball	MICR digital camera/webcam joystick/games controller graphics tablet wand	1
			bar code reader touch screens/pad	sensor microphone	Any 1 x 1 mark	
1	(b)	(i)	Printer (allow prefix e.g. laser)		Correct answer only	1
1	(b)	(ii)	E (Monitor)		Correct answer only	1
1	(b)	(iii)	plotter motor/robot arm lights	actuator/relay speaker/headphones	Any 1 x 1 mark	1
1	(c)		D (DVD drive)		Correct answer only	1
2	(a)		D: Hotspots to be placed over parts of pictures		Correct answer only	1
			E: Hyperlinks to be created from text or graphics		Correct answer only	1
2	(b)		H: Solution of 'what if.....' problems		Correct answer only	1
			F: Replication of cells		Correct answer only	1
2	(c)		G: Selections of a picture can be reflected, scaled and morphed		Correct answer only	1
			I: Use of brushes		Correct answer only	1
3	(a)		Line spacing		Correct answer only	1
			Centre		Correct answer only	1

- 3 (b)
- Picture/clipart added/graphic/logo
 - Text/font size made bigger/smaller/changed
 - (Text made) bold/underline/italic/font style
 - Drawing tools/auto shape
 - Using bullet points/numbering/lists
 - Tables
 - Text boxes/Frames
 - Borders/Border Art
 - Text font type changed/Word Art used
 - Columns/Tab/Indentation/Margins
 - Coloured background/pattern/shade/watermark
 - Orientation (portrait/landscape)
- 2
- NOT 'colour' on its own**
- Any 2 for 1 mark each for feature named.**
- Can be easily read/makes text stand out
 - Looks more attractive
 - Produces professional layouts/interesting layouts
 - Grabs people's attention/eye-catching/noticeable
 - So you know what it is about (picture/clipart/graphic **ONLY**)
 - Corporate ID (logo)
- 2
- Any 2 for 1 mark each relating to above (could be repeats)**
- 3 (c) Spell checker
Grammar checker
- 1
- Both words needed (not just "spelling") Any 1 x 1 mark**

4	Title	at least 3/coded
	House no.	at least 3
	Street - Address line 1	at least 10
	Town/Area/County - Address line 2	at least 10
	(address – instead of above)	at least 20/memo/or 2x10

Not any other “name” field

NOTE MAX TWO FOR ADDRESS LINES

If terms Address 1 and town are mixed up – usually gains one tick

Postcode at least 7
(or clear 3box gap 3 box)

Telephone number (day) / 1	at least 11
Telephone number (evening) / 2	at least 11
Contact tel. Number	at least 11
Mobile tel. Number	at least 11
Fax number	at least 11

NOTE MAX TWO TELEPHONE NUMBERS

E-mail address	at least 20(sensible splits) memo
Date (of joining)/date at end of form	at least 8(2-2-2/4)
DOB	at least 8(2-2-2/4)
Gender	at least 6 or coded
Name of Doctor/previous Doctor	at least 15
Doctor’s address	at least 20 any no. of lines or memo

1 doctor mark only

Boxes only unless memo specified

– open boxes are OK – boxes with small vertical lines are OK but dashes are NOT.

Memo = lines/boxes/dashes IGNORE FILLING IN

Mark only the first 5 fields

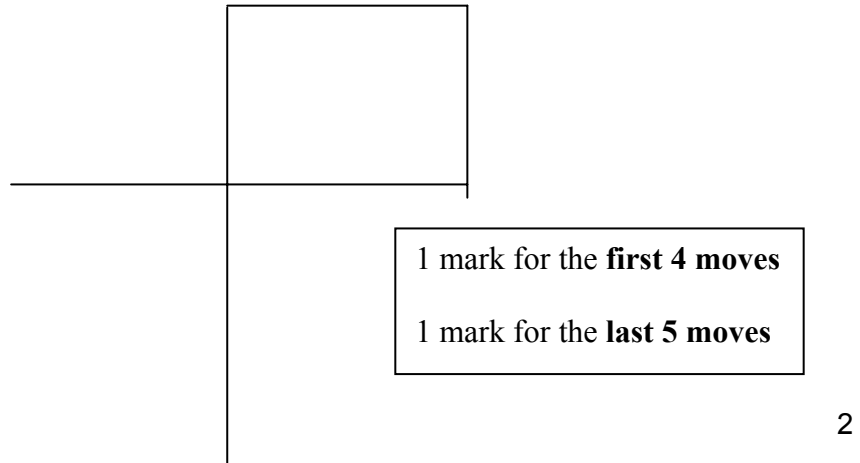
Ignore correct duplicate fields e.g. 3rd telephone number – these do not count in the FIVE.

Tick correct field name – do not penalise lack of capitals

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

Count ticks - divide by 2 - round down **Max 5 marks**

5 (a)



5 (b) FD 5
RT 90
FD 2 1 mark

BK 5
RT 90
FD 2 1 mark

Other correct answers are possible
and must be awarded the marks

OR FD 5
LT 90
FD 3 1 mark

LT 90
FD 2
BK 2
LT 90
FD 5 1 mark

- | | | | | | |
|---|-----|-------|--|----------------------------|---|
| 6 | (a) | (i) | B | Correct answer only | 1 |
| 6 | (a) | (ii) | D | Correct answer only | 1 |
| 6 | (a) | (iii) | A | Correct answer only | 1 |
| 6 | (a) | (iv) | C | Correct answer only | 1 |
| 6 | (b) | | Evaluation Documentation
Feasibility Maintenance
Monitoring User Guide | Any 1 x 1 mark | 1 |
| 7 | (a) | | A key field must never be empty | Correct answer only | 1 |
| | | | A key field must contain a different value in each record in the database table | Correct answer only | 1 |
| 7 | (b) | | It takes less time / quicker to enter data
Fewer errors
It takes up less storage space | Any 1 x 1 mark | 1 |
| 7 | (c) | | To lock all computer rooms when not in use | Correct answer only | 1 |
| | | | Use clamps and cables to attach the computer to the desk | Correct answer only | 1 |

7	(d)	Make it long/quite long/more than 6 characters Make it something not easy to guess/not related to you Make it a combination of letters/numbers/upper lower case Make something you will remember Don't write it down/don't tell anyone Change it regularly	Any 2 x 1 mark	2
8	(a) (i)	A5	Correct answer only	1
8	(a) (ii)	Number	Correct answer only	1
8	(b) (i)	(=)sum(C3:C11) – allow C12 or C13 instead of C11 (=)C3+C4+C5+C6+C7+C8+C9+C10+C11 – allow +C11+C12	Any x 1 mark	1
8	(b) (ii)	=C3*3+D3	Correct answer only	1
8	(c)	Click on the word Help or '?' on the top of the spreadsheet/ press F1 Type in formulae/formula and select one of the options given		1 1
9	(a)	Checking of data on INPUT by software to see if it is reasonable/sensible/within a given range (not correct)	Any 2 x 1 mark	2
9	(b)	range (check)	Correct answer only	1
		presence (check)	Correct answer only	1
10	(a) (i)	FG123 TV459 Ignore grammar and punctuation or multiple lines	Correct answer only	1
10	(a) (ii)	FZ034 Freezer FG156 Fridge TV517 Television Not "TV" or "Telly" but ignore minor spelling mistakes	Correct answer only	1
10	(b) (i)	List Product Code When Product Name Equals DVD player	Correct answer only	1
10	(b) (ii)	List Product Code, Product Name When Selling price (£) Greater than 500	Correct answer only Correct answer only	1 1
11	(a)	You can transfer money 24 hours a day You can pay bills from your account without having to leave home	Correct answer only Correct answer only	1 1

11	(b)	<ul style="list-style-type: none"> • Not feel a personal service/don't like using computers/don't know how • Access/ISP can cost money • Virus issues • Hacking issues • Not everyone has access to Internet/computers/computer broken/Internet down • Fraud/Phishing/Identity theft/less secure 	2
		Any 2 x 1 mark	
12	(a)	Back problems	Correct answer only 1
		Eye strain	Correct answer only 1
12	(b)	<ul style="list-style-type: none"> • Regular breaks/walk around/relaxation techniques/fresh air/physical exercise • Correctly position in relation to computer and screen • Visit doctor for advice • Use wrist support/rests • Ergonomically designed keyboard 	2
		Any 2 x 1 mark	
12	(c)	<ul style="list-style-type: none"> • Trailing wires • Electrical faults • Overload sockets/supply • Radiation 	2
		Any 2 x 1 mark	
13	(a)	(i) Random Access Memory	Correct answer only 1
13	(a)	(ii) RAM is volatile memory	Correct answer only 1
13	(b)	Information should be kept accurate and up to date	Correct answer only 1
		Information should be relevant and not excessive for the purpose	Correct answer only 1
		Information should be kept secure	Correct answer only 1
13	(c)	The right to see or be sent a copy of the data held about them	Correct answer only 1
		The right to seek compensation for damage caused by inaccurate data	Correct answer only 1
14	(a)	(i) Heat sensor / thermistor/ temperature sensor	1
		Not thermometer	
		Correct answer only	
14	(a)	(ii) Any average reading across the sensors may be best	
		One might get broken/backup	
		Conditions may vary across the island (and give unrepresentative values)	
		Large area to cover with only one sensor	
		Compare readings to identify errors	1
		Any 1 x 1 mark	

14	(b)	(i)	B (logging interval)	Correct answer only	1
14	(b)	(ii)	A (Calibrate)	Correct answer only	1
14	(b)	(iii)	C (Period of logging)	Correct answer only	1
14	(c)		Can operate 24/7 efficiently Do not have to go out in “bad” weather Readings would be more accurate/no human error Can be taken at very short intervals if needed Would not have to waste time travelling to the island/safer than travelling/cheaper than travelling Cheaper than employing a person	Any 2 x 1 mark	2