



## **General Certificate of Secondary Education**

# **Information and Communication Technology 3521F Full Course *Specification A***

**3521/F      Foundation Tier**

## **Mark Scheme**

*2008 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.

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1	(a)	C (drawing)	Correct answer only	1
1	(b)	H (word processing)	Correct answer only	1
1	(c)	B (desk top publishing)	Correct answer only	1
1	(d)	F (spreadsheet)	Correct answer only	1
1	(e)	A (database)	Correct answer only	1
1	(f)	E (modelling)	Correct answer only	1
2		D	Correct answer only	1
3		D	Correct answer only	1
4		B or D		1
5		B	Correct answer only	1
6	(a)	The exclusive <b>legal</b> / own /belong to (publish/ perform/ film/ record.....) Protection of creative or artistic works		1
6	(b)	Clip-art is sometimes free of copyright	Correct answer only	1
6	(c)	A <b>fine</b> / pay compensation <b>Prison</b> sentence <b>Caution</b>	Any 1 x 1 mark	1

- 6 (d) **Different Features (look for bold features)** 3
- **Numbered** points / **bullet** points
  - Increase text size/**Text** size made **bigger**
  - Text made **bold/italics/underline/ Changed font style/effects** e.g. shadowing
  - **Coloured** text / **coloured** background / **colour**
  - **Alignment - Centre** text/ Text **right/fully justify/rotate text**
  - Import company **logo/picture**
  - **Move, rotate, edit images, drawing tools/auto shape**
  - **Tables**
  - **Text boxes**
  - **Borders/Border Art**
  - **Columns/Tab/margins**
  - **Shaded/pattern/watermark/transparency**
  - **Text wrapping**
  - **Page size / orientation**
  - **Word art**
  - **Master page/header/footer/page numbers**
- Any 3 x 1 mark

7	Membership Number or equivalent    at least 5 Title    at least 3 Surname/family name    at least 10 Other names/first name/initials    at least 10	6
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**NOTE MAX THREE FOR NAME**

House number	at least 2
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 2 x 10

**NOTE MAX TWO FOR ADDRESS LINES**

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

Postcode	at least 7 (3 space 3)
Telephone number (day)	at least 11
Telephone number (evening)	at least 11
Contact tel. number/emergency 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/memo (sensible splits)
Photo	box to fit
Date of membership/expiry of membership	at least 8 (2-2-2/4)
Identification given	at least 10
DOB	at least 8 (2-2-2/4)
(allow over 18 and YES/NO)	at least 3
Signature	memo
NB – could use the date at end of form	

**NOT NI – Not doctor, not doctor’s address etc.**

Boxes only unless memo specified

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

Memo = lines/boxes/dashes IGNORE FILLING IN

**Mark only the first 6 fields**

Ignore correct duplicate fields e.g. 3<sup>rd</sup> telephone number – these do not count in the SIX

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

8	(a)	A14	Correct answer only	1
8	(b)	Date Currency Text Number Formulae Merging /wrapped text <b>Accept close spelling</b>	Any 3 x 1 mark	3
8	(c)	<b>Column</b> (graph)/chart <b>Bar</b> (graph)/3D Bar Graph etc. <b>Pie</b> (chart) Bold word is needed	Any 1 x 1 mark	1
8	(d)	<b>(=) d17/b5</b> (or /c11 or /c12) For d17 could be Sum(d8:d12) or = sum(d17/b5) (D8+D9+D10+D11+D12); use of : (colon) instead of + OK without = sign. <b>NOT</b> d17/150	Must use the / sign	1
8	(e)	<b>1. Check the cost in D19</b> (Cost per student) is < £20 or <= £20 (visual or validation) <b>2. Reduce cost/number in.....</b> (e.g. decorations / meal etc or cell reference) <b>OR increase the number of students.</b> <b>3. Check for error message</b> <b>4. Repeat steps 1 and 2 until cost in D19</b> (Cost per student) is <£20 <= £20 (Ok / acceptable) Allow Goal seeker solutions that cover these points <b>Goal seek by itself scores 1</b> (2 <sup>nd</sup> mark from above possible)	Any 2 x 1 mark	2
9	(a)	C (data logging)	Correct answer only	1
9	(b)	K (sensor)	Correct answer only	1
9	(c)	H (logging interval)	Correct answer only	1
9	(d)	B (calibrate)	Correct answer only	1
10	(a)	<b>MUST USE COMMAND LIST ONLY</b> Fd6 (or Fd5 Bk4 Fd5)  Rt90 Fd5 Both instructions <b>Allow spaces and capitals / lower case</b>	1 mark	2

10	(b)	<b>MUST USE COMMAND LIST ONLY</b>	2
		Fd6 (or Fd5 Bk4 Fd5)	
		Rt90 Both instructions	1 mark
		 Bk4	 1 mark
		 <b>OR</b>	
		Fd6	
		Rt90	
		Rt90	
		Rt90 All instructions	1 mark
		 Fd4	 1 mark
		<b>Allow spaces and capitals / lower case</b>	
		<b>Max 2 marks for this part of the question.</b>	

10 (c) MUST USE COMMAND LIST ONLY 3

**Moving to A**

Fd6 (or Fd5 Bk4 Fd5)

Rt90

Fd5

1 mark

**Mark this part before starting the movement to B**

\*\*\*\*\**Movi*

**ng to B**

Bk4

Bk5 (either order for Bk4 and Bk5) 1 mark

OR

**Moving to B**

Rt90

Rt90

Fd4

Fd5 (either order for Fd4 and Fd5) 1 mark

**Mark this part before starting the movement to start**

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**If the second mark is wrong then look for any of these solutions for the third mark.**

**Moving to starting position**

Fd4

Rt90

Fd6 (or Fd5 Bk4 Fd5)

1 mark

OR

Bk4

Rt90

Rt90

Rt90

Fd6 (or Fd5 Bk4 Fd5)

1 mark

OR

Rt90

Rt90

Fd4

Rt90

Fd6 (or Fd5 Bk4 Fd5)

1 mark

\*\*\*\*\*

**Allow spaces and capitals / lower case**

**Any extra movement at the end– no penalty.**



11	(a)	<b>Directly /electronically connected to a computer/</b> computer system/network/internet NOT just log in	1 mark	1
11	(b)	<b>Advantages to the customer</b>	<ul style="list-style-type: none"> <li>• Often <b>cheaper</b>, rather than getting it from a local shop – cheaper on its own is OK</li> <li>• Done from the <b>comfort of your own home</b> or the idea of not leaving the house/no need to travel</li> <li>• <b>Wide choice</b> of goods / goods available from <b>all over the world</b></li> <li>• <b>Shop 24 / 7</b></li> </ul>	2
		Any 2 x 1 mark		
11	(c)	<b>Disadvantages to company/individual</b>	<ul style="list-style-type: none"> <li>• Not feel a <b>personal service</b></li> <li>• Staff can <b>waste time just surfing the net</b></li> <li>• Access/ISP can <b>cost money</b></li> <li>• <b>Virus</b> issues</li> <li>• <b>Hacking</b> issues</li> <li>• May cause <b>unemployment</b> – must be clear this applies to the companies</li> <li>• <b>Fear</b> of buying due to <b>credit card security</b> would cut sales/identity theft</li> <li>• <b>Not</b> everyone has <b>access/skills to Internet/computers/computers could go down</b></li> <li>• <b>May get lost/damaged</b> in the post</li> <li>• Potential customers are <b>less likely to know the company/individual exists</b></li> </ul>	2
		Any 2 x 1 mark		
11	(d)	<b>Reasons for not allowing some goods</b>	<ul style="list-style-type: none"> <li>• <b>Illegal / stolen / Copyright</b> (to have them or sell them – suitable example is fine)</li> <li>• Dangerous / offensive goods</li> <li>• Seller banned from site</li> </ul>	1
		Any 1 x 1 mark		
12	(a)	<b>G</b> (OMR)	Correct answer only	1
12	(b)	<b>H</b> (Questionnaire)	Correct answer only	1
12	(c)	<b>A</b> (Bar codes)	Correct answer only	1
12	(d)	<b>D</b> (Magnetic strip) OR <b>I</b> (sensor)		1
12	(e)	<b>E</b> (MICR)	Correct answer only	1

13	(a)	Heating Pets Allowed	Any x1 mark	1
13	(b)	12	Correct answer only	1
13	(c)	<b>Unique/different</b> identifier for each record		1
13	(d)	Sensible	Correct answer only	1
13	(e)	Max people	Correct answer only	1
13	(f)	<b>Faster to search</b> (NOT easier) <b>Faster to sort</b> /sort on multiple fields <b>Faster/easier to edit</b> /update Takes up <b>less space</b> <b>Backup data</b> <b>Less chance of losing</b> /misplacing records on a computer <b>Faster/neater to graph</b> data <b>Access</b> from <b>outside office</b> <b>Faster/more attractive</b> generation of <b>reports</b> <b>Access</b> by <b>several people at one time</b> <b>Export</b> to other applications <b>More secure because</b> ..... <b>Validation</b> helps to <b>reduce errors</b> <b>NOT easy to use (0)</b>	Any 2 x 1 mark	2
14	(a)	D H	Correct answer only Correct answer only	1 1
14	(b)	B or E or F	Correct answer only	1
14	(c)	C	Correct answer only	1
14	(d)	A or I	Correct answer only	1
15	(a)	Most obvious/ <b>easiest to guess</b> /everyone knows his name NOT just the words 'his name'		1
15	(b)	<b>Adfhi1245361</b> Least obvious/ <b>hardest to guess</b> /figure out/random/ no meaning <b>Longest</b> <b>Combination</b> of upper/lower case letters and numbers	Correct answer only Any 1 mark	1 1
15	(c)	Wide Area Network	Correct answer only	1
15	(d)	To access news/ <b>send stories</b> from anywhere across the world To access <b>breaking news</b> quickly	Any 1 mark	1

16	(a)	<b>Sending a text message/attachment/file/picture</b> Over a <b>communications network</b> LAN/WAN/Internet/WAP phone/from one computer to another <b>Electronic Mail scores nothing by itself.</b>	1 1
16	(b)	E-mails will arrive faster	Correct answer only 1
		E-mails are cheaper to send	Correct answer only 1
16	(c)	Can use <b>tracking</b> with post / Can obtain <b>proof of posting</b> from Post Office Need <b>computer / Internet/computer broken</b> Cannot send <b>physical objects</b> (e.g. parcels) Remote location <b>may have post but not internet</b> connections virus NOT hacking/spam	1 Any 1 mark
16	(d)	<b>Immediate answer /reply/ quick two way communication</b> Can “ <b>read</b> ” the reply by tone of voice etc. <b>More personal</b>	1 Any 1 mark
17	(a)	software	Correct answer only 1
17	(b)	Managing system security including memory	Correct answer only 1
		Transferring data to a printer	Correct answer only 1
17	(c)	Multi-user	Correct answer only 1
17	(d)	Multi-tasking                  real time                  batch processing Windows ...                  RISCOS                  Linux NOT just XP, Vista, etc by itself	1