AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Secondary Education

Information and Communication Technology 3527H Short Course
Specification A

3527/H   Higher 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.

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		E	Correct answer only	1
3		A	Correct answer only	1
4		B	Correct answer only	1
5		D	Correct answer only	1

6	(a)	**Increase text size**/Text size made **bigger** Changed **font type/name** Text made **bold/** font **style** **Centre** text **Numbered** points/indents Any 3 x 1 mark		3

| 6 | (b) | **Different Features (look for bold features)** | | 4 |

- **Bullet** points
- Text made **italics/underline**
- **Coloured** text / **coloured** background / **colour**
- **Alignment -** Text **right/(fully) justify**
- Import company **logo/clip art/picture/image**
- **Drawing tools/auto shape**
- **Tables**
- **Text boxes/frames**
- **Borders**/Border Art
- **Columns/Tab/margins**
- **Shaded/pattern/watermark**
- **Text wrapping**
- **Page size / orientation**
- **Word art**

Any 2 x 1 mark

Reasons – can appear twice
If feature incorrect, can't gain credit for reason

- Can be **easily read**
- Looks more **attractive/more interesting**
- Produces **professional layouts**
- Produces **interesting layouts**
- Makes text **stand out**
- **Grabs** peoples **attention/eye catching/more noticeable**   Any 2 x 1 mark

7	(a)	Text	Correct answer only	1
		Date	Correct answer only	1
		Text	Correct answer only	1
		Currency	Correct answer only	1

| 7 | (b) | Title | | 2 |

Postcode
Mobile phone number/Emergency phone number
National Insurance number
Fast food branch/ location
Job title
Date started
Hours worked (each week)/Overtime worked
Qualifications
Gender
Ethnic background/nationality
Disability
Bank details
e-mail address   Any 2 x 1 mark

| 7 | (c) | Presence check /Alpha numeric check/Length check | | 1 |
| | | Presence check/Range check/Data type /numeric / currency check | | 1 |

| 8 | (a) | **Cell** | Correct answer only | 1 |

| 8 | (b) | Date
Currency
Text
Number
Formulae
Merging /wrapped text
Accept close spelling | Any 3 x 1 mark | 3 |

| 8 | (c) | **Column** (graph)/chart
Bar (graph)/3D Bar Graph etc.
Pie (chart)
Bold word is needed | Any 1 mark | 1 |

| 8 | (d) | **(=) d17/b5** (or /c11 or /c12) Must use the / sign
For d17 could be Sum(d8:d12) or = sum(d17/b5)
(D8+D9+D10+D11+D12); use of : (colon) instead of +
OK without = sign. **NOT** d17/150 | | 1 |

| 8 | (e) | **1. Check** the **cost in D19** (Cost per student) is < £20 or <= £20
(visual or validation)
2. Reduce cost/number in……….. (e.g. decorations / meal etc
or cell reference)
OR **increase the number of students.**
3. Check for error message
4. **Repeat steps 1 and 2 until cost in D19** (Cost per student)
is **<£20 <= £20** (Ok / acceptable)
Allow Goal seeker solutions that cover these points
Goal seek by itself scores 1 (2nd 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   MARK ANY FOUR   4
      • **Process** data **fairly/lawfully**
      • **Obtain** data **fairly/lawfully**
      • **Destroy data** when no longer needed/not kept longer
        than needed
      • **Keep data secure against** (one of)
        loss/damage/unlawful processing
      • **Only use for registered purpose**
      • Process within the rights of the data subjects
      • **Keep up-to-date/accurate**
      • Data must not be **excessive for the purpose**
      • **Data must not be transferred to countries outside
        EEC/EU**
                                            Any 4 x 1 marks

11   (a)   MUST USE COMMAND LIST ONLY   2
             Fd6   (or Fd5 Bk4 Fd5)   1 mark

             Rt90
             Fd5   Both instructions   1 mark
             Allow spaces and capitals / lower case

| 11 | (b) | 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
****

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.

| 12 | (a) | Heating | | 1 |
| | | Pets Allowed | Any 1 mark | |

| 12 | (b) | 12 | Correct answer only | 1 |

| 12 | (c) | **Unique/different** identifier for each record | | 1 |

12	(d)		**Faster** to **search** (NOT easier) **Faster to sort**/sort on multiple fields **Faster/easier** to **edit**/update Takes up **less space** **Backup data** **Less chance of losing**/misplacing records on a computer **Faster/neater to graph** data **Access** from **outside office** **Faster/more attractive** generation of **reports** **Access** by **several people** at **one time** **Export** to other applications **More secure because**……………… **Validation** helps to **reduce errors** **NOT easy to use (0)** Any 3 x 1 mark	2
12	(e)	(i)	C4UH02 Correct answer only	1
12	(e)	(ii	C4UC01 C4UH03 Both answers **– words/separators between OK**	1
12	(e)	(iii)	C4UC02 C4UC04 C4UC06**– words/ separators between OK** ALLOW IN ANY ORDER	1
12	(f)	(i)	Missed out by **mistake / error** Missed out as **no validation** put on the field Details **not sent in** by the owner of holiday home Any 1 mark	1
12	(f)	(ii)	Use **validation** 1 mark **presence check** or **drop-down menu** or **default set to Y (or N)** or suitable explanation 1 mark	2
13	(a)		**Directly /electronically connected to a computer/** computer system/network/internet 1 mark NOT just log in	1
13	(b)		**Advantages to the customer** • Often **cheaper**, rather than getting it from a local shop – cheaper on its own is OK • Done from the **comfort of your own home** or the idea of not leaving the house/no need to travel. • **Wide choice** of goods / goods available from **all over the world** • **Shop 24 / 7** Any 2 x 1 mark	

13	(c)	**Disadvantages to company/individual**	2

- Not feel a **personal service**
- Staff can **waste time just surfing the net**
- Access/ISP can **cost money**
- **Virus** issues
- **Hacking** issues
- May cause **unemployment** – must be clear this applies to the companies
- **Fear** of buying due to **credit card security** would cut sales/identity theft
- **Not** everyone has **access/skills to Internet/computers/computers could go down**
- **May get lost/damaged** in the post
- Potential customers are **less likely to know the company/individual exists**

Any 2 x 1 mark

13	(d)	**Reasons for not allowing some goods**	1

- **Illegal / stolen / Copyright** (to have them or sell them – suitable example is fine)
- Dangerous / offensive goods
- Seller banned from site

Any 1 mark

14	(a)	**Sending** a text **message**/attachment/file/picture/letter	1
		Over a **communications network**	1

LAN/WAN/Internet/WAP phone/from one computer to another
Electronic Mail scores nothing by itself.

14	(b)	E-mails will arrive faster Correct answer only	1
		E-mails are cheaper to send Correct answer only	1

14	(c)	Can use **tracking** with post / Can obtain **proof of posting** from Post Office	1

Need **computer / Internet/computer broken**
Cannot send **physical objects** (e.g. parcels)
Remote location **may have post but not internet** connections
virus
NOT hacking/spam   *Any 1 mark*

14	(d)	**Immediate answer** /reply/ quick **two way communication**	1

Can **"read" the reply** by tone of voice etc.
More personal

Any 1 mark

15 (a) Answers need to relate to **possible consequences to the** 3
          company
          - Letter/packages etc. **delivered to wrong address**
          - Bills/invoices sent out will be wrong **(customers charged too much for an item)**
          - Employees **wages could be wrong**
          - Telephone calls to ….. go to the **wrong numbers/wrong people contacted**
          - Wrong financial information – **loans refused**
          - Creates a **bad/poor image** for the company
          - **Loses customers as a result of ………**
          - Company gets into **legal problems** – sued/fined
          - **Breaks DPA**
          - **Sensitive information** goes out to the **wrong people**

                                                    Any 3 x 1 mark

15 (b) **Any of the following:** 3
          - Failure to / **not update regularly**
          - **Entered wrongly**/inaccurately accidentally / deliberately/human error
          - **Amended incorrectly**
          - **Hardware problems**/failure e.g. back storage failure etc.
          - **Hackers** changing data/data tampered with
          - **Virus** attack

                                                    Any 3 x 1 mark

15 (c) **Any of the following:** 4
          - **Data validation**/or an example
          - **Data verification / Proof read/ double checking entry**
          - **Use of coded data**
          - Keep **backup** copies
          - **Regular service** of hardware
          - **Firewall**
          - **Virus checker**
          - **Passwords/access levels**

                                                    Any 4 x 1 mark