



General Certificate of Secondary Education

Information and Communication Technology 3527F Short Course *Specification A*

3527/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.

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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) | 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) (i) **D** (Joystick) 1
F (Microphone)
K (Touch sensitive screen)

1 mark any correct answer (max 1 mark)

7 (a) (ii) Concept keyboard MICR (reader) 1
 OCR (reader) Web cam
 OMR (reader) Tracker ball
 Joystick/game controller Bar code (reader)
 Graphic tablet Laser pen
 Touch screens/pad Light pen
 Interactive whiteboard Digital camera
 Mouse Graphic digitizer
 Keyboard Sensor
 Scanner

Please do not allow backing store

Any 1 mark

| | | | | |
|--|-----|------|---|---|
| 7 | (b) | (i) | F (Laser printer) H (Plotter) J (Speaker) | 1 |
| 1 mark any correct answer (max 1 mark) | | | | |
| 7 | (b) | (ii) | Monitor Dot-matrix printer | 1 |
| | | | Ink-jet printer COM | |
| Please do not allow backing store Any 1 mark | | | | |
| 7 | (c) | (i) | B (CD-ROM) C (hard disk) I (RAM) | 1 |
| 1 mark any correct answer (max 1 mark) | | | | |
| 7 | (c) | (ii) | Floppy disk (drive) Zip disk (drive) CD-RW (drive) Flash card DVD - RW | 1 |
| | | | Memory stick/Pen drive CDR (drive) EPROM DAT tape/Magnetic tape (drive) | |
| NOT just disk drive OR CD OR Compact Disc Any 1 mark | | | | |
| 8 | (a) | | Cell | 1 |
| | | | Correct answer only | |
| 8 | (b) | (i) | Date Accept close spelling | 1 |
| 8 | (b) | (ii) | Currency Accept close spelling | 1 |
| 8 | (c) | | Column (graph)/chart Bar (graph)/3D Bar Graph etc. Pie (chart) Bold word is needed | 1 |
| | | | Any 1 mark | |
| 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) | <p>1. Check the cost in D19 (Cost per student) is < £20 or <= £20 (visual or validation)</p> <p>2. Reduce cost/number in..... (e.g. decorations / meal etc or cell reference)</p> <p>OR increase the number of students.</p> <p>3. Check for error message</p> <p>4. Repeat steps 1 and 2 until cost in D19 (Cost per student) is <£20 <= £20 (Ok / acceptable)</p> <p>Allow Goal seeker solutions that cover these points</p> <p>Goal seek by itself scores 1 (2nd mark from above possible)</p> <p style="text-align: right;">Any 2 x 1 mark</p> | 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) | <p>Directly /electronically connected to a computer/ computer system/network/internet</p> <p style="text-align: right;">1 mark</p> <p>NOT just log in</p> | 1 |
| 10 | (b) | <p>Advantages to the customer</p> <ul style="list-style-type: none"> • Often cheaper, rather than getting it from a local shop – cheaper on its own is OK/no need to travel • Done from the comfort of your own home or the idea of not leaving the house • Wide choice of goods / goods available from all over the world • Shop 24 / 7 <p style="text-align: right;">Any 2 x 1 mark</p> | 2 |

| | | | |
|----|-----|--|---|
| 10 | (c) | <p>Disadvantages to company/individual</p> <ul style="list-style-type: none"> • 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 <p style="text-align: right;">Any 2 x 1 mark</p> | 2 |
| 10 | (d) | <p>Reasons for not allowing some goods</p> <ul style="list-style-type: none"> • Illegal / stolen / Copyright (to have them or sell them – suitable example is fine) • Dangerous / offensive goods • Seller banned from site <p style="text-align: right;">Any 1 mark</p> | 1 |
| 11 | (a) | <p>MUST USE COMMAND LIST ONLY Fd6 (or Fd5 Bk4 Fd5) 1 mark</p> <p>Rt90 Fd5 Both instructions 1 mark</p> <p>Allow spaces and capitals / lower case</p> | 2 |
| 11 | (b) | <p>MUST USE COMMAND LIST ONLY Fd6 (or Fd5 Bk4 Fd5) Rt90 Both instructions 1 mark</p> <p>Bk4 1 mark</p> <p>OR Fd6 Rt90 Rt90 Rt90 All instructions 1 mark</p> <p>Fd4 1 mark</p> <p>Allow spaces and capitals / lower case Max 2 marks for this part of the question.</p> | 2 |
| 11 | (c) | <p>MUST USE COMMAND LIST ONLY Moving to A Fd6 (or Fd5 Bk4 Fd5) Rt90</p> | 3 |

Fd5 1 mark
Mark this part before starting the movement to B
 ***** **Moving 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 | Data has no meaning/no context Information has meaning/has context Example of data e.g. 040607 Example of information e.g. 4th June 2007 Any 3 x 1 mark | 3 |
| 13 | 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 |

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. 3rd 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

| | | | | |
|----|-----|--|---------------------|---|
| 14 | (a) | Heating Pets Allowed | Any x1 mark | 1 |
| 14 | (b) | 12 | Correct answer only | 1 |
| 14 | (c) | Unique/different identifier for each record | | 1 |

| | | | | |
|----|-----|--|-----------------------------------|--------|
| 14 | (d) | Sensible | Correct answer only | 1 |
| 14 | (e) | Max people | Correct answer only | 1 |
| 14 | (f) | 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 2 x 1 mark | 2 |
| 15 | (a) | Resizing of objects | Correct answer only | 1 |
| | | Importing of images | Correct answer only | 1 |
| 15 | (b) | Use of brushes addition of text (any DTP) NOT just 'fonts' Picture to be moved, copied, rotated, reflected, scaled freehand drawing Use of colour colour fills textual effects Crop Not resizing of objects Not Importing of images | Any 1 mark | 1 |
| 15 | (c) | Can have whatever you want for the logo rather than what is available in clip-art. Import photographs Can modify/personalise existing clip-art to suit school's needs. Accept change/add colours | Any 2 x 1 mark | 2 |
| 16 | (a) | Most obvious/ easiest to guess /everyone knows his name NOT just the words 'his name' | | 1 |
| 16 | (b) | Adfhi1245361 Least obvious/ hardest to guess /figure out/random/ no meaning Longest Combination of upper/lower case letters and numbers | Correct answer only Any 1 mark | 1 1 |

| | | | |
|----|-----|---|--------|
| 16 | (c) | <p>Stop access to “some” employees of the paper accessing Daniel’s article</p> <p>Stop people from outside the newspaper/hackers accessing Daniel’s article</p> <p style="text-align: right;">Any 1 mark</p> | 1 |
| 16 | (d) | <p>Lock doors</p> <p>Lock keyboard</p> <p>Security guards</p> <p>Retina scans</p> <p>Security passes</p> <p style="text-align: right;">Any 2 x 1 mark</p> | 2 |
| 17 | (a) | <p>Sending a text message/attachment/file/picture/letter</p> <p>Over a communications network</p> <p>LAN/WAN/Internet/WAP phone/from one computer to another</p> <p>Electronic Mail scores nothing by itself.</p> | 1 1 |
| 17 | (b) | <p>E-mails will arrive faster Correct answer only</p> <p>E-mails are cheaper to send Correct answer only</p> | 1 1 |
| 17 | (c) | <p>Can use tracking with post / Can obtain proof of posting from Post Office</p> <p>Need computer / Internet/computer broken</p> <p>Cannot send physical objects (e.g. parcels)</p> <p>Remote location may have post but not internet connections</p> <p>virus</p> <p>NOT hacking/spam Any 1 mark</p> | 1 |
| 17 | (d) | <p>Immediate answer /reply/ quick two way communication</p> <p>Can “read” the reply by tone of voice etc.</p> <p>More personal</p> <p style="text-align: right;">Any 1 mark</p> | 1 |