



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme

June 2003

GCSE

Information and Communication Technology A

Short Course

3527 Foundation

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Answers to multiple choice questions

- | | | | | |
|----|---|---|---------------------|-----|
| 1. | B | C | Correct answer only | (2) |
| 2. | B | | Correct answer only | (1) |
| 3. | B | D | Correct answer only | (2) |
| 4. | C | | Correct answer only | (1) |
| 5. | B | | Correct answer only | (1) |

Words instead of letters is OK (if correct)

Total 7 marks

6. Answers to IN/OUT/storage question

- | | | | | |
|-----|--------------------|--------------|---------------------|------------|
| (a) | Graphics digitiser | | | |
| | Keyboard | | | |
| | Light Pen | | | |
| | Mouse | | | |
| | Joystick | | | |
| | | Any 4 | Correct answer only | (4) |
| (b) | Laser Printer | | | |
| | Plotter | | | |
| | Monitor | | | |
| | Speaker | | | |
| | | Any 3 | Correct answer only | (3) |
| (c) | CD-ROM | | | |
| | RAM | | | |
| | Hard disc | Any 2 | Correct answer only | (2) |

Ignore spelling mistakes

Total 9 marks

7. Answers to DTP question

(a)

Can use
heading

- Picture/clipart/image/graphic/logo added
- Title/font/text made bigger/enlarged
- (Title/font/text) made bold/underline/italic (max 2)
- (Text) centred **NOT** middle
- Bullet points /indent/tab made
- Text font changed/Wordart used/Shading/Shadow
- Border/borderart added **NOT** frame

WRITING NOT GIVEN**Any 5 for 1 mark each (5)**

(b)

Just
COLOUR
1 mark

- Change font **name ie Times Roman** (if not above)
- Coloured picture/image/graphic
- Coloured text/font/title could be used **NOT** word
- Coloured/shaded/decorated background could be used
- Coloured border (max 2 for colour)
- Text right/fully justify
- Change the line/text/letter spacing
- Use numbering instead of bullet points
- Layering/watermark/wrapping text
- Add table
- Change orientation/rotation of text

NOT more of ie add more pictures**NO REPEATS of the changes already made.****Not just move things around.****Any 2 for 1 mark each (2)****Total 7 marks**

8. Answers to Data Protection Act question**Given**

- A: Data is obtained for specified and lawful purposes.
B: Data is accurate and up-to-date.
C: Data where national security is concerned.
D: Data is never to be given to anyone.
E: Data must not be more than six months old.
F: Data held on individuals must be sent to them on request.
G: Data can be prevented from being used for direct marketing.
H: Data that individuals want removed from their record must be removed immediately.
I: Data is not to be transferred outside the UK
J: Data is to be kept secure against loss, damage or unauthorised processing.
K: Data used for health, education and social work.

- (a) A: Data is obtained for specified and lawful purposes.
B: Data is accurate and up-to-date.
F: Data held on individuals must be sent to them on request.
J : Data is to be kept secure against loss, damage or unauthorised processing.

Letter or words OK

3 × 1 mark Correct answers only **(3)**

- (b) F: Can ask for and must be given a copy of data held about them.
G: Can prevent data from being used for direct marketing.

Letter or words OK

Correct answers only **(2)**

- (c) C: Data where national security if concerned.
K: Where data is used for health, education and social work.

2 × 1 mark Correct answers only **(2)**

Total 7 marks

9. Answers to data capture form question

Membership Number or equivalent	at least 5
Type of membership	at least 6 (or coded but needs OTHER)
Title	at least 3 (or coded)
Surname	at least 10
First name	at least 10
Name (for one mark)	at least 20
Sex	at least 6 (or coded)
DOB (not age)	at least 8 (or coded)
Number (house)	at least 3
Street - Address line 1	at least 10
Town/Area/County -Address line 2	at least 10
(address – instead of above – 1 mark)	at least 20/memo/or 2 × 10
NOTE MAX TWO FOR ADDRESS LINES (excluding postcode)	
Postcode	at least 7 (or 3 space 3)
If Address 1 and street are mixed up – usually gains one mark	
Telephone number (day)	at least 11
Telephone number (evening)	at least 11
Contact tel. Number	at least 11
Mobile tel. Number	at least 11
Emergency tel. Number	at least 11
NOTE MAX TWO TELEPHONE NUMBERS	
Emergency contact name	at least 14
Fax number	at least 11
E-mail address	at least 20 (sensible splits)
Photo	box to fit
Medical conditions/allergies	at least 20/memo
Classes attended	at least 10
Date of membership/expiry of membership	at least 8(2-2-2/4)
NB – could use the date at end of form	
Fee paid/subs	at least 6

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

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 8 fields

Ignore correct duplicate fields eg. 3rd telephone number – these do not count in the EIGHT.

Tick correct field name – do not penalise lack of capitals

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

Count ticks - divide by 2 - round down

Total 8 marks

10. Answers to simulation question

- (a) Less dangerous/safer(to the firemen and those around)/environmentally better
Cheaper than replacing/repairing damage fire engines/not using fuel
Not just cheaper
Can vary conditions at will/try out different situations/repeat many times.
Illegal to speed on roads **NOT** more confidence
Any 2 × 1 mark(2)
- (b) It takes longer to stop on wet roads rather than on dry roads CAO (1)
How visibility will change in foggy conditions. CAO (1)
The maximum speed of the fire engine CAO (1)
- (c) Flying a plane/training pilots/landing planes/rockets/helicopters/space shuttles
Conditions in a nuclear reactor/chemical plants/power stations
Military/firearms training/combat/bomb disposal
Games/ride simulators
Disaster planning/emergencies
Design simulations e.g. building, bridges, cars
Training doctors/surgeons
Psychological Training (Phobias/fears)
Sports simulations
NOT just the word entertainment
Any 2 × 1 mark (2)

Total 7 marks

11. Answers to decorating spreadsheet questions

- (a) **B7** Correct answers only **(1)**
- (b)(i) number/currency Correct answers only **(1)**
- (ii) text Correct answers only **(1)**
- (c) (i) (=)B3*C3 **(1)**
 NOT 3B or 3C = at end mark wrong must be * not ×
 Allow the use of (=)sum()
 Allow D3=B3*C3

- (ii) (=)Sum(D3:D16) Range could be D1-D17 (must inc. D3 to D16)
 or Sum(D3..D16)

D3+D4+D5+D6+D7+D8+D9+D10+D11+D12+D13+D14+D15+D16 IS ok **(1)**

If the whole centre has a different separator – ring team leader

- (d) Reduce the number of **(1)**
 Reduce to zero is fine
 Don't buy a carpet is fine (or similar) **NOT** change
 Reduce cost of
Must be reducing
 Use Goal Seek
Second mark is for the check
 That the total keeps within £550/within budget/refer to D18 **(1)**

Total 7 marks

12. Answers to data/information question

- (a) Data has no context/ meaning/sense **1 mark**
 Information has context/ meaning/sense **1 mark**
Could give clear examples not given below
NOT INPUT/OUTPUT
- (b) Information Correct answer only **1 mark**
 Data Correct answer only **1 mark**
 Information Correct answer only **1 mark**

Total 5 marks

13. Answers to data logging/data capture question

data logging	Correct answer only	(1)
feedback	Correct answer only	(1)
OCR	Correct answer only	(1)
calibration	Correct answer only	(1)

Ignore capitals and poor spelling**Total 4 marks****14. Answers to health and safety question**

- (a) Epilepsy (trigger)
 Eye problems/ eye strain/headaches
 Repetitive strain injury (RSI) – pains in arms, wrists and fingers
 Bad backs/necks
 Exposure to radiation/danger in pregnancy
 Stress
 NOT arthritis/obesity/addiction
Any 2 × 1 mark (2)

MUST RELATE to their answer but could be implied rather than explicit.
 If more than two answers – mark the first two.

- (b) **Eye strain**
 Free eye tests
 Screens kept free from flicker/regular refresh
 Reduce reflected light/glare – “matt” systems
 Bright lighting (reduce contrast between VDU and surrounding light)
 Ability to change the angle of the screen
 Ability to adjust the screen brightness and contrast
 Close curtains/blinds
 Look away from the screen to another object
 Take a break/do something different
- Repetitive strain injury (RSI) – pains in arms, wrists and fingers**
 Concave-shaped keys
 Keyboard lies flat or be at an angle of up to 10 degrees
 Separate from VDU so the user can adjust
 Take a break/do something different
- Bad backs**
 Chairs designed to swivel
 Chairs have adjust back support/height
 Operators not to work too long without a break (allows change in posture)
 Use a foot rest
- Exposure to radiation**
 Use shield to protect from radiation
 Have equipment checked regularly

Any 2 ×1 for chosen danger (2)

Total 4 marks

15. Answers to database questions

- | | | | |
|--------|--|---------------------|-----|
| (a) | 8 | Correct answer only | (1) |
| (b) | 7 (allow 56) | Correct answer only | (1) |
| (c)(i) | Pupil Number | Correct answer only | (1) |
| | (ii) Unique identifying field (or similar) showing retrieval of exact record | | (1) |
| (d)(i) | 16-04-99 or equivalent – clearly identifies the error | | (1) |
| | (ii) This is outside of the range of dates for year 7 pupils | | (1) |
| | Too young (for school) | | |
| | All the other 90 or 91 | TOO OLD is WRONG | |
| | (iii) Set up a range check on Date of Birth/drop down | | (1) |
| | Error signalled for such a DOB – outside the range/stop it being entered/
won't let you move on | | (1) |

Total marks 8**16. Answersto charts/Web design question**

- | | | | |
|--------|--|-----------------------|------------|
| (a) | Construction pie charts from tables of data | Correct answer only | (1) |
| | Produce labels and axes, legends and headings | Correct answer only | (1) |
| | Edit the number scales on the axes | Correct answer only | (1) |
| (b)(i) | text/image/word/sentence/picture/object which provides links to other pages (in an information store) | | (1) |
| (ii) | An area which displays further information/provides links to other pages (in an information store) | | (1) |
| | NOT Spot | | |
| (c) | Add/delete pages | | |
| | Set up styles/house styles | | |
| | Change links | | |
| | Look at/edit HTML | | |
| | Add a counter for counting hits | | |
| | Allow DTP features (max 1 mark) | | |
| | | Any 2 × 1 mark | (2) |
| | Not answers given above eg. | | |
| | not hyperlink/hotspot - not answer from (a) | | |

Total 7 marks

