

ASSESSMENT and QUALIFICATIONS ALLIANCE

Mark scheme June 2003

GCSE

Information and Communication Technology A

Full Course

3521 Foundation

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The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and a registered charity number 1073334 Registered address: Addleshaw Booth & Co., Sovereign House, PO Box 8, Sovereign Street, Leeds LS1 1HQ Kathleen Tattersall: *Director General* Answers to multiple choice questions

| 1. | B | С | | Correct answer only | (2) |
|---------|-----|-----------------------|--------------|---------------------|---------------|
| 2. | B | | | Correct answer only | (1) |
| 3. | B | D | | Correct answer only | (2) |
| 4. | С | | | Correct answer only | (1) |
| 5. | B | | | Correct answer only | (1) |
| Words | ins | tead of letters is OK | (if correct) | | |
| | | | | | Total 7 marks |
| | | | | | |
| 6. Ansv | wer | rs to IN/OUT/storag | ge question | | |
| (a) | | Graphics digitiser | | | |
| | | Keyboard | | | |
| | | Light Pen | | | |
| | | Mouse | | | |
| | | Sensor | | | |
| | | | Any 4 | Correct answer only | (4) |
| (b) | | Laser Printer | | | |
| | | Plotter | | | |
| | | Monitor | | | |
| | | Speaker | | | |
| | | | Any 3 | Correct answer only | (3) |
| (c) | | CD-ROM | | | |
| | | DVD ROM | | | |
| | | DVD RAM | | | |
| | | Hard disc | Any 2 | Correct answer only | (2) |
| | | | | | |

7. Answers to DTP question

(a)

- Picture/clipart/image/graphic/logo added
- Title/font/text made bigger/enlarged
- (Title/font/text) made bold/underline/italic
- (Text) centred
- Bullet points /indent/tab made
- Text font changed/Wordart used
- Border/borderart added

WRITING NOT GIVEN

Any 5 for 1 mark each (5)

(max 2)

(b)

- Change font **name ie Times Roman** (if not above)
- Coloured text/font/title could be used
- Coloured/shaded background could be used
- Coloured border
- Text right/fully justify
- Change the line spacing
- Use numbering instead of bullet points
- Layering/watermark
- Add table
- Change orientation

NOT more of ie add more pictures NO REPEATS of the changes already made. Not just move things around.

WRITING NOT GIVEN

Any 2 for 1 mark each (2)

(Max 2 for colour)

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8. Answers to data capture form question

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| Membership Number or equivalent | at least 5 | | | |
|---|------------------------------|--|--|--|
| 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 2x10 | | | |
| NOTE MAX TWO FOR ADDRESS LINE | ES ABOVE | | | |
| Postcode | at least 7 (3 space 3) | | | |
| If Address 1 and street are mixed up – usual | ly 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 NUMB | ERS | | | |
| 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/medication | 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 | | | | |
| Type of membership | at least 6 | | | |
| Fee paid/subs – 1 only for subs at least 6 | | | | |
| NOT NI - Not doctor, not doctor's address/n | ext of kin | | | |
| Boxes only unless memo specified | | | | |
| [] – open boxes are OK – boxes with small ve | rtical lines are OK but | | | |
| dashes are NOT. | | | | |
| Memo = lines/boxes/dashes | IGNORE FILLING IN | | | |
| Mark only the first 5 fields | | | | |
| Ignore correct duplicate fields eg. 3 rd 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 for corresponding field name. | | | | |
| Count ticks - divide by 2 - round down | | | | |
| If code is a list that is "open " then "others" ne | eded. | | | |
| | | | | |

9. Answers to data logging/data capture question

| data logging | Correct answer only | (1) |
|-----------------------------------|---------------------|-----|
| MICR | Correct answer only | (1) |
| magnetic strips | 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 6 marks

10. 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)

11. Answers to decorating spreadsheet questions

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| (a) | B 7 | Correct answers only | (1) | |
|---|--|----------------------|----------|--|
| (b)(i) | number | Correct answers only | (1) | |
| (ii) | text | Correct answers only | (1) | |
| (c) (i) | (=)B3*C3 NOT 3B or 3C = at end mark wrong Allow the use of (=)sum() Allow D3=B3*C3 | must be * not > | (1) (| |
| (ii) (=)Sum(D3:D16) Range could be D1-D17 (must inc. D3 to 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 | | | (1) | |
| (d) | Reduce the number of Reduce to zero is fine Don't buy a carpet is fine (or si Reduce cost of Must be reducing | | (1) | |
| | Second mark is for the check That the total keeps within £55 | 0/within budget | (1) | |

12. Answers to database questions

| (a) | 8 | Correct answer only | (1) |
|-----------------|--|---------------------|------------|
| (b) | 7 (allow 56) | Correct answer only | (1) |
| (c) (i) (ii) | Sex OR Date of Birth OR Tutor Group (ignore capitals/spelling) Faster to type Less storage needed | Correct answer only | (1) |
| | | Any 2 × 1 mark each | (2) |
| (d)(i) | Pupil Number | Correct answer only | (1) |
| (ii) | Unique identifying field (or similar) | | (1) |
| (e)(i) | 16-04-99 or equivalent – clearly identifies the e | rror | (1) |
| (ii) | This is outside of the range of dates for year 7 p Too young (for school) All the other 90 or 91 | upils | (1) |
| (f) | Set up a range check on Date of Birth Error signalled for such a DOB – outside the ran | nge | (1) (1) |

Total 11 marks

13. Answers to health and safety question

(a) Epilepsy (trigger)
Eye strain/headaches
Repetitive strain injury (RSI) – pains in arms, wrists and fingers
Bad backs
Exposure to radiation
Stress
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. Not obesity

(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)

14. Answers to applications software question

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| (a) | Communications | Correct answer only | (1) |
|-----|---------------------|---------------------|-----|
| (b) | Mail-merging | Correct answer only | (1) |
| (c) | Word processing | Correct answer only | (1) |
| (d) | Spreadsheet | Correct answer only | (1) |
| (e) | Data Logging | Correct answer only | (1) |
| (f) | Database | Correct answer only | (1) |
| (g) | Desk top publishing | Correct answer only | (1) |

Total 7 marks

15. Answers to user interface software question

(a) Menu (driven) Graphical interface/GUI

| | | Any 2 × 1 mark | (2) |
|-----|-----------------------------|---------------------|-----|
| (b) | A consistency of layout | Correct answer only | (1) |
| | A consistency of text style | Correct answer only | (1) |
| | The use of sound | Correct answer only | (1) |

- (c))(i) text/image/word/sentence which provides links to other pages (in an information store) (1)
 - (ii) An **area (look for as the mouse moves)** which displays further information or provides links to other pages (in an information store) (1)



16. Answers to operating system question

| (a) | Group of programs/program/software that control the overall operation of of a computer | | |
|-----|--|---|-------------------|
| | | Any 2 × 1 mark | (2) |
| (b) | Software | Correct answer only (1) | |
| (c) | Manages system resources including memory Manages the allocation of CPU time Manages the system security | Correct answer only Correct answer only Correct answer only | (1) (1) (1) |
| (d) | Multi-user Multi-programming/tasking Real time Batch Processing Transaction processing Windows/Unix/DOS (max 1 mark) NOT network | | |
| | | Any 2 × 1 mark | (2) |