AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Secondary Education

Information and Communication Technology 3521
Specification A

3521/F Full Course (Foundation Tier)

Mark Scheme
2005 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.	C	Correct Answer Only	1 mark
2.	A	Correct Answer Only	1 mark
3.	D	Correct Answer Only	1 mark
4.	D and E	Correct Answers Only (2x1)	2 marks
5.	A, B and F	Correct Answer Only (3x1)	3 marks
6.	A	Correct Answer Only	1 mark

Total 9 marks

7

Storage	Correct Answer only	1 mark
Input	Correct Answer only	1 mark
Storage	Correct Answer only	1 mark
Input	Correct Answer only	1 mark
Output	Correct Answer only	1 mark
Output	Correct Answer only	1 mark
Input	Correct Answer only	1 mark
Output	Correct Answer only	1 mark

Total 8 marks

8.

Items need not be in the order given below (but must be grouped as given)
Headings Ok but not needed for the marks

(a)   **General details – all there and grouped (5 items)**   **1 mark**
    Allow Lancre Playgroup Summer Fair as a discrete title (even if separate)
                - ignore spelling mistakes, capitals & wrong tel no.
                - ok, with or without the words Date, Where etc.
                - does not need title General Details or other headings
                - Telephone number OK without Lancre

Date/Where   - correct date and spelling (see above)   **1 mark**

Admission details - all there and grouped **(3 items)**   **1 mark**
            - ignore spelling mistakes, capitals
            - prices **all correct**

Stall details   – all there and grouped **(7 items)**   **1 mark**

            - ignore spelling mistakes, capitals

Other attractions details   – all there and grouped **(3 items)**   **1 mark**
                - ignore spelling mistakes, capitals

                                Sub total 5 marks

(b)   **The indication must be clear to get the mark.**
            o An arrow pointing at where the feature would be used
            o Written right next to the feature /place to be used
            o Written in words as to where the feature will be used

Large & bold font   – indicate any of the following:-
            headings/date/where/time/price/tel no/Title   **1 mark**

Coloured text   – indicate any of the following:-
                - could be a repeat of above
    headings/date/where/time/price/tel no. any "block of details" 1 mark

Importing clip-art - must say what the picture is / be a clear relevant picture
            (not just the word picture)   **1 mark**
            -one picture is enough (sensible picture – accept most)
            - some indication of the position if not drawn

                                Sub total 3 marks

(c) **Allow repeat reason for 2 but NOT 3 of the following:-**
Large bold font - reason for large bold title   **1 mark**
- Can be easily read
- Looks more attractive/eye-catching/appealing
- Looks more professional
- Makes text stand out/grabs peoples attention

Coloured text - reason for coloured text   **1 mark**
- Looks more attractive/eye-catching/appealing
- Looks more professional
- Makes text stand out/grabs peoples attention

Importing clip-art- reason for use of clip-art   **1 mark**
- Looks more attractive/eye-catching/appealing
- Professional
- Interesting/less boring
- Grabs peoples attention
- Shows people what is happening

                                                    Sub total 3 marks

9 (a)	(i)	Implementation	**Correct answer only**	**1 mark**
	(ii)	Analysis	**Correct answer only**	**1 mark**
	(iii)	Testing	**Correct answer only**	**1 mark**
	(iv)	Design	**Correct answer only**	**1 mark**
	(v)	Design	**Correct answer only**	**1 mark**
	(vi)	Evaluation	**Correct answer only**	**1 mark**
	(vii)	Design	**Correct answer only**	**1 mark**

                                                    Total 7 marks

(b)   **Observation** of the existing system
        Questionnaires/Survey to ask about the existing system
        Looking at documentation of the existing system
        (User Guide/specification)
        Interview users of the existing system
        Look for the key words in bold. Accept equivalent but not vague ideas
        Any 2 x 1 mark   **(2)**

                                                    Total 2 marks

10.Ignore any leading OPEN
Accept CLOSE for 1 mark even the command(s) are wrong
Part A

DOWN 3	**Correct answer only**	**1 mark**
CLOSE	**Correct answer only**	**1 mark**

Mark independently
(CLOSE ends this section)

****
Part B – look for

UP 3	**Correct answer only**	**1 mark**
RIGHT 14	**Correct answer only**	**1 mark**
DOWN 4		
OPEN	**Correct answer only**	**1 mark**
UP 4		
LEFT 14	**Correct answer only**	**1 mark**

NB – stop at first ERROR
Ignore obvious spelling errors, incorrect case and spacing
If all along one line then accept (e.g. DOWN 3 CLOSE, etc)
Allow labelled instructions

Deduct 1 mark for use of consistent abbreviations throughout (e.g. RT – RIGHT)
Deduct 1 mark for use of units (e.g. cm or units)
OR deduct one mark for repeat of whole instruction
Max deduct is 1 mark
SPECIAL CASE

 Part B could contain a version that works not using the commands from the list.

This will be given either   2 marks for totally correct or 0 marks

AND stop at first mistake as before (wrong move)

11

sensor	**Correct answer only**	**1 mark**
data logging	**Correct answer only**	**1 mark**
period of logging	**Correct answer only**	**1 mark**
logging interval	**Correct answer only**	**1 mark**
calibrate	**Correct answer only**	**1 mark**
feedback	**Correct answer only**	**1 mark**

Total 6 marks

12 (a) Cheaper as printers can be shared **Correct answer only** **(1)**

Data can be quickly and easily transferred between computers **CAO** **(1)**

Users can communicate with each other **Correct answer only** **(1)**

(b) Problems with server/serve breaks down effects all other computers
Viruses pass (quickly) from machine to machine
Increased security problems (other peoples files)
Increased installation costs (not just more expensive)
"Big brother" watching you issues
NOT hardware has to be maintained.
NOT printer queues
Any 1 x 1 mark **(1)**

Sub total 1 mark

(c) Wide Area Network **Correct Answer only** **(1)**

(d) **Wide Area Network – usually** **Local Area Network - usually**

Town/world wide room/building wide/site
(clear example such as Internet) (clear example such as a school)
Uses comms to connect connects with wires

NOT candidate just repeating "local area" or "wide area"
One item from each gets two marks
Any 2 x 1 mark **(2)**

Total 6 marks

13(a) A **Correct answer only** **(1)**

D **Correct answer only** **(1)**

E **Correct answer only** **(1)**

Total 3 marks

(b) **any additional tasks**
Scans each user in set sequence (may be round robin)
Allocates user time/resource allocation in set sequence

Allow other operating system routines.
- Organise/manage/supervises the programs whilst they are running
- Provides start up instructions (boot up)
- Handling interrupts
- Share resources (between different tasks)
- Reporting on errors/Error handling

- Dealing with passwords/security (e.g. user Ids, levels of access)
- Allocation of storage space.

No repeats of A-F
NOT Communication between hardware and software (0)

Any 1 x 1 mark   **1 mark**

(c) **Any additional tasks**

Appears to be working on more than one task/program at once

Allow other operating system routines.
- Organise/manage/supervises the programs whilst they are running
- Provides start up instructions (boot up)
- Handling interrupts
- Share resources (between different tasks)
- Reporting on errors/Error handling
- Dealing with passwords/security (e.g. user Ids, levels of access)
- Allocation of storage space.

No repeats of A-F
NOT Communication between hardware and software (0)

Any 1 x 1 mark   **1 mark**
Any 1 x 1 mark   **(1)**
Sub total 1 mark

14 (a)

- The information is more likely to be up to date. (allow updated)
- May not be able to take the books home.
- Research could include sound or video clips
- Could be many more(sources)of information.
- May be more fun/motivating to "do the research"
- Could use search engines to find specific information
  (quicker to find/faster to search/more efficient to search)
- Use chat lines to ask questions
- Several languages
- Books can be lost or damaged
- Get printouts
- Export to other documents

NOT faster to look for or faster to find
Any 2 x 1 mark   **(2)**
Sub total 2 marks

(b) **Load (or equivalent)** a suitable search engine e.g. Google/Jeeves etc.
   (not just search engine – in question)
   Type in suitable search criteria/words/what you are looking for
   Review finds for the most likely/suitable hits
      Refine search as needed
   Any 2 x 1 mark   **(2)**
   Sub total 2 marks

(c)
- Can take the book anywhere
- Much more likely to be sure of the source of the information.
- Access to the internet may be interrupted
- Access to the internet costs money
- Computer might breakdown/not available/not enough computers
- Not computer literate
- Know exactly which book the info is in/ specific book
- Habit/like books/known the system

NOT just "easier to use"
Any 2 x 1 mark   **(2)**
                                                              Sub total 2 marks

(d)   Teletext (or similar)
          CD-ROM – allow named CD-ROM eg Encarta
          Allow other text eg magazine
          Allow CD or video (clip)
          Any 1 x 1 mark   **(1)**
                                                              Sub total 1 mark

15 (i) field   **Correct answer only**   **(1)**
       Key field

    (ii) compression   **Correct answer only**   **(1)**

    (iii) encryption   **Correct answer only**   **(1)**

    (iv) a password   **Correct answer only**   **(1)**

    (v) a virus   **Correct answer only**   **(1)**

                                                      Total 5 marks

16 (a) Reduce the duplication of data only put in the data once
        Easier/faster to keep the data up to date
        Increases the consistency of data/ fewer mistakes or errors

    Any 2 x 1 mark each   2 marks

    (b)   Animal's name   **Correct answer only**   1 mark

              Date of last treatment   **Correct answer only**   1 mark

              Date of Birth of the animal **Correct answer only**   1 mark

                                                      Total 3 marks

    (c) A unique field that is used to identify a record   **1 mark**

    (d) Animal number / Id. Number or suitable equivalent   **1 mark**
              NOT owner code or account number