

GCSE 2004
June Series



Mark Scheme

Information and Communication

Technology Specification A (Short Course)

(Subject Code 3527/F)

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1 (a)

Screen
Dot-matrix printer
Plotter
Speaker
Motor

1 mark each Correct answer only (5)

(b) Keyboard

Scanner

1 mark each Correct answer only (2)

(c)	concept Keyboard	MICR (reader)	OCR (reader)
	digital camera/Web cam	OMR (reader)	
	joystick/games paddle	bar code (reader)	
	sensor	graphics tablet	
	touch screens/pad	microphone	
	mouse/tracker ball	light pen	
	graphics digitiser	laser pen	
	Electronic Whiteboard		

Any 2x1 (2)

(d) floppy disk
ROM

1 mark Correct answer only (1)

(e)	CD-ROM	CD-R
	DVD ROM	CD-RW
	DVD RAM	flash memory
	hard disk (allow hard drive)	zip disk (drive)
	Dat tape/ magnetic tape (drive)	
	memory stick/pen	
	RAM/EPROM etc.	

Any 1 (1)

Total 11 marks

2

a) Desk Top Publishing Package (DTP)

Allow word processing package. **NOT PowerPoint or Excel**

Allow named DTP and w/p software eg. Word, Publisher etc.

1 mark

b) Part b) mark independently

- Picture/clipart added/graphic/image/logo
- Text/font size made bigger/smaller/changed
- Text font type eg Arial changed/Word art used
- Text made bold/underline/italic/text style changed
- Text centred
- Using bullet points/numbering/lists
- Drawing tools/auto shape
- Tables
- Text boxes
- Borders/Border Art
- Columns/Tab
- Shaded/pattern/watermark
- Text wrapping
- Text right/(fully) justify
- Change the line spacing
- Import text
- Spellchecker/grammar checker
- Grouping together/moving around/drag & drop
- Copy and paste/cut and paste

One bullet point can only score one mark.

NOT just background

NOT just Wizard/template

NOT “writing” for the first mark. Give for additional named repeats.

NOT just alignment

NB – allow “change/different font” for one mark but if a second font change is given then assume it is the same as the first. i.e. if given a mark for “change font” then no additional mark would be given for the answer “change font style”

Mark the first 4 answers only

Any 4 for 1 mark each for feature named

Total 5 marks

3.

FORWARD 60 **Correct answer only** **1 mark**

(Or allowable equivalent e.g. FORWARD 20 FORWARD 40 etc.)

NOT FORWARD 10 FORWARD 5

RIGHT 90

FORWARD 60

Correct answer only **1 mark**

RIGHT 90

FORWARD 30

Correct answer only **1 mark**

RIGHT 90

FORWARD 40

Correct answer only **1 mark**

LEFT 90

FORWARD 20

Correct answer only **1 mark**

RIGHT 90

FORWARD 20

Correct answer only **1 mark**

Ignore returning to the start **Total 6 marks**

Reverse order !!! (Not really possible) – Max possible is 5 MARKS

FORWARD 10 **NOT ON MARK SCHEME**

RIGHT 90

FORWARD 20

Correct answer only **1 mark**

LEFT 90

FORWARD 20

Correct answer only **1 mark**

RIGHT 90

FORWARD 40

Correct answer only **1 mark**

LEFT 90

FORWARD 30

Correct answer only **1 mark**

LEFT 90

FORWARD 60

LEFT 90

FORWARD 60

Correct answer only **1 mark**

If mm or degrees or abbreviations FD etc. used , lose the first mark.

4

(a) (i) C6 **Correct answer only - 1 mark**

(ii)

C10 **Correct answer only**
C12 **Correct answer only**

2 x 1 mark

(b) Number
Currency
Date
Text
Formulae
Bold
Centre
(Column) width

Any 3 x 1 mark

(c) Faster to edit/change/alter/amend
Neater/easier/edit/change/alter/amend
Changes are automatically recalculated in totals.
Time saved using replicate
Clearer/better presentation/layout
Validation advantages
More accurate/fewer errors

By hand is taken as a minimum of pen, pencil and brain.

Any 2 x 1 mark

Total 8 marks

5. NOT “first name” as already given

Title	at least 3
Surname/Last name	at least 10
Other names	at least 10

NOTE MAX TWO FOR NAME

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 2x10

NOTE MAX TWO FOR ADDRESS LINES**If terms Address 1 and town are mixed up – usually gains one tick**

Postcode	at least 7
(or clear 3box gap 3 box)	
Telephone number (day)	at least 11
Telephone number (evening)	at least 11
Contact tel. 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(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)
Gender	at least 6 (or coded)
(allow over 18 and YES/NO)	at least 3
Membership Number or equivalent	at least 5
Signature	Memo
Date	at least 8(2-2-2/4)

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 OK – boxes with small vertical lines are OK but dashes are NOT.

Memo = lines/dashes/large box/dots IGNORE FILLING IN

Mark only the first 7 fields (Do not count first name)Ignore correct duplicate fields eg. 3rd telephone number – these do not count in the SEVEN.

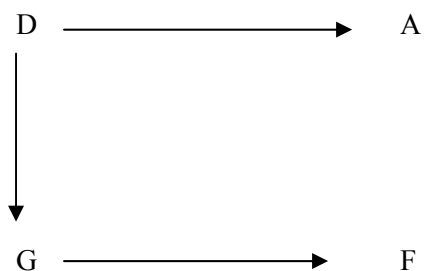
Tick correct field name – do not penalise lack of capitals

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

Count ticks - divide by 2 - round down **MAX 7 marks****Design given 1 or 0****Don’t give the mark if you cannot read or the form is VERY disorganised. Or LESS THAN 3 FIELDS****Total 8 marks**

6(a) Check decision boxes

Is the correct pair in the process box?



D must be linked with A
(if D is wrong A cannot be given)

G must be linked with F
(if G is wrong F cannot be given)

2 x 1 mark for each pair
Either order is OK
Total 4 marks

(b) Heat sensor (temperature sensor) / thermistor/thermo-couple **1 mark**
(Not THERMOMETER or sensor)

(c) Any suitable answer that is greater than or equal to 1 minute
less than or equal to 30 minutes **1 mark**

Total 6 marks

7. Advantages

- Cheaper because.....
 - Less staff to pay
 - No fancy shop to pay for
 - To advertise from Web page
- Faster to
 - access a range of info about new products
 - Obtain latest information
 - Access worldwide databases
 - E-mail customers rather than mail them about....
- World wide market rather than a local one.
- Create an e-business
- Creates some jobs
- Shorter hours become possible
- Sales at any time of the day
- Can deal with more people at the same time
- Power of Advertising on the Web

Any 3 x 1 mark

Disadvantages

- Local people might not know you are there
- 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 shops
- Fear of buying due to credit card security would cut sales
- Not everyone has access to Internet/computers

Any 2 x 1 mark

Total 5 marks

8.

- Use data/Process data fairly/lawfully/use data lawfully
- Obtain data fairly/lawfully
- Destroy data when no longer needed/not kept longer than needed
- Keep data secure against /loss/damage/unlawful processing
(ALLOW CLEAR SECURITY METHOD for 1 mark)
- Only use for registered purpose
- Allow customers to see **THEIR OWN** data on request/ process within the rights of the data subjects.
- Keep up-to-date/accurate
- Data must not be excessive for the purpose/relevant/adequate
- Data must not be transferred to countries outside EEC
- Must register (with DP Commissioner or Registrar)

Any 3 x 1 mark

Total 3 marks

9.	B (RAM)	Correct Answer Only	1 mark
10.	A (OMR)	Correct Answer Only	1 mark
11.	D	Correct Answer Only	1 mark
12.	A and B	Correct Answer Only	1 mark

Answer in words OK
1 mark each

Total 5 marks

13a) Password Qszxfg7596 **1 mark**
Allow transposition errors or capitals

Reason Less likely to guess – not obviously linked to Sarah
 Longer – less likely to guess
Any 1 x 1 mark

b) Password Sarah **Correct Answer Only 1 mark**

Reason Most likely to guess – obviously linked to Sarah
 Shortest – most likely to guess – less letters
Any 1 x 1 mark

c) (i) Software/is a program
 Replicates itself
 Cause problems/damage/deletes/destroys to other software or systems

Any 2 x 1 mark

(ii) From a floppy disk brought into school
 From the Internet
 From an e-mail
 Written by a pupil

Any 1 x 1 mark

d) (i) Encoding the information (or some of it) on the network
 Even if pupils got hold of sensitive info, it would not be able to “read” without the “key”
 Any one 1mark **1 mark**

Total 8 marks

14.

(a) Data – has no meaning in itself
 because it has no context/structure
 needs a context to turn it into information
 good example

Any 1 x 1 mark

(b) Information it has meaning/ can be understood
 because it has a context/structure
 good example

Any 1 x 1 mark

(c) (i) Data **Correct Answer Only 1 mark**
 (ii) Information **Correct Answer Only 1 mark**
 (iii) Data **Correct Answer Only 1 mark**
 (iv) Data **Correct Answer Only 1 mark**

Total 6 marks

15. NB – looking for answers related to THIS application

- (i) Graphics software uses/needs lots of memory
Imported images may be large
Editing images needs lots of memory
May be handling lots of images
Any 1 x 1 mark
- (ii) Makes it easier to see detail/draw
Colour so that the drawing can be seen in colour
Easier to compare/see in detail multiple images
Any 1 x 1 mark
- (iii) Graphics/images/design files that need to be saved can be very large
Not program
1 mark
- (iv) Editing/handling/dealing with graphics (files/pictures/designs) requires a lot of processing. So a fast processor is needed to deal with these in an acceptable time.
Could be dealing with lots of programs/tools/images together
Rendering/tweening of images takes a lot of processing
1 mark
- (v) For saving/backing up **LARGE FILES**
Allow large files to be imported/exported
Distribution to customers/clients/companies
NOT just for saving
1 mark
- Total 5 marks**

16.

- a) Wrist problems
Headaches

Correct Answer Only 1 mark each

- b) **Back problems**
Regular breaks/walk around
Correctly adjusted chair
Back support correct in chair
Any 2 x 1 mark or expanded answer to one point

Total 4 marks