



General Certificate of Secondary Education  
2011

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**Information and Communication Technology**

Short Course

Paper 1

Foundation Tier

[G5301]

MONDAY 13 JUNE, AFTERNOON

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**MARK  
SCHEME**

- 1** (a) B Software designed to damage the computer [1]
- (b) B The Computer Misuse Act [1]
- (c) A The Data Protection Act [1]
- (d) B It cannot be erased [1]
- (e) C Stores data when it is being copied [1]
- (f) A Are written using HTML and may contain hyperlinks [1]
- (g) C The buying and selling of goods and services via the Internet [1]
- (h) D When text flows automatically around a graphic [1]
- (i) B Reduce the number of web pages returned in a search [1]
- (j) C Monitor [1]

AVAILABLE  
MARKS

10

AVAILABLE MARKS

2 (a) Merged [1] or centred [1] or centred across selection [1] [1]

(b)

2	ITEM	Quantity	Cost	Total Cost	% Discount	Discount £	Total Payable
3	Airporter Bus Ticket	15	£20.00	B3*C3 Not Sum [1]	10%	D3/10 D3*E3 Or D3*10% Or D3* 10/100 D3*0.1 Not Sum [1]	D3-F3 Accept Sum [1]

AVAILABLE MARKS

[3]

(c) (i) Instead of (:): accept (-), (to), (,)

A3 Cell range 1 A3:A9 [1] A2:A9 [1] A2/A3, A4, A5, A6, A7, A8, A9 [1]

A9 Cell range 2 G3:G9 [1] G2:G9 [1] G2/G3, G4, G5, G6, G7, G8, G9 [1]

A3-9 [1] G3-9 [1] [2]

(ii) ONE from:

The cost of each item on the list [1]

The cost of any particular(named) item on the list [1]

The most expensive/cheapest/comparative cost [1] [1]

Not Total Cost

7

- 3 (a) CC – recipients see the email address of all recipients [1]  
 BCC – recipients see only their own email address [1]  
 Don't see anybody else's email address [1] [2]
- (b) Browse... to locate the file [1] Pick/Select/Choose the file [1]  
 Attach...add the file to the email [1] [2]

AVAILABLE  
MARKS

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4 (a)

Task	Software
Perform financial calculations on customer data.	Select <b>ONE</b> only <input type="checkbox"/> Database <input checked="" type="checkbox"/> Spreadsheet <input type="checkbox"/> Desktop Publishing <input type="checkbox"/> Email
Store customer records without repeating data.	Select <b>ONE</b> only <input checked="" type="checkbox"/> Database <input type="checkbox"/> Spreadsheet <input type="checkbox"/> Desktop Publishing <input type="checkbox"/> Email
Create a flyer to advertise the company.	Select <b>ONE</b> only <input type="checkbox"/> Database <input type="checkbox"/> Spreadsheet <input checked="" type="checkbox"/> Desktop Publishing <input type="checkbox"/> Email

[3]

- (b) (i) Any **two** from:  
 The combination of text/graphics [1] animation [1] video [1]  
 sound [1] [2]

- (ii) A piece of **software/program** [1]  
 which helps the user **step by step** [1]/through a series of options/  
 screens [1]/to produce an end product [1]/which gives the user step  
 by step instructions [1]  
 A program which helps user [1]  
 A wizard is a program [1] [2]

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5 (a) (i) Graphic(al) User Interface [1] [1]

(ii) One from:

**Windows** [1] a part of the screen where the user can see separate applications or several can be opened at once [1]

**Icons** [1] a picture or graphic or symbol which represents a program/file, e.g. My Documents or which is a shortcut to a program [1] or which opens program [1]

**Pull down Menu** [1]/**Menus** [1] an onscreen list from which the user can choose an operation to be performed, e.g. pull down menu [1]

**Mouse** [1]/**Pointers** [1] a cursor which moves around the screen and allows users to point or select item [1] [2]




(b) To play/read/copy/write CD/DVD [1] [1]

(c) To allow the connection of peripheral devices[1]/USB wireless dongle [1].  
Accept the name of any **two** peripherals which can be connected via USB – 1 mark for each. [2]

(d) Data/pictures can be read/uploaded/downloaded from a smartmedia [1]/ memory card [1]  
No need to connect the device [1] [1]

AVAILABLE  
MARKS

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Device	Device Name	Use
<p>(i)</p>  <p>© <a href="http://www.teach-ict.com">http://www.teach-ict.com</a></p>	<p>Concept Keyboard [1]</p>	<p>Select food items [1]</p> <p>Use fingert or ouch appropriate picture [1] or Supermarket/Fast food tills [1]/Drink dispensing machines [1]</p>
<p>(ii)</p>  <p>©iStockphoto/Thinkstock</p>	<p>Tracker pad [1]</p> <p>Touch pad [1]</p>	<p>Moves cursor/pointer/ mouse [1]</p> <p>Tap pad with finger [1] or Laptop instead of mouse [1]</p> <p>Allow selection of icons/ selection on screen [1]</p>
<p>(iii)</p>  <p>©Hemera/Thinkstock</p>	<p>Joystick [1]</p>	<p>Use hand to manoeuvre the stick left/right each action representing data [1] or Playing games [1] Navigating games [1] Selecting options [1]</p>

(b) A laser printer is a type of NON IMPACT [1] printer. It produces HIGH [1] quality printouts and uses TONER [1] to print on paper. A DOT MATRIX [1] printer can produce carbon copies because the print head makes contact with the paper. [4]

- 7 (a) **Two** from:  
 Webcam/digital camera/video camera [1] Not camera  
 speakers [1]  
 microphone [1]  
 screen/projector [1]  
 Broadband/ADSL/fast Internet connection/ISDN/modem [1]/  
 router [1] [2]

- (b) **Two** from:  
 Body language/face to face [1] Pupils will be able to see/question  
 the author directly [1] they may gain a better understanding from  
 questioning the author directly [1] No need to travel to meet/No travel  
 overheads [1] Meeting can be set up when it suits the author [1]  
 Immediate response [1] [2]

- (c) Internet could be slower [1]/Accept a statement which makes reference  
 to decreased performance [1] [1]

5

- 8 (a) A database is an **organised** collection of information. [1]  
 Each entry about a person or item in a database is called a **record**. [1]  
 Data can be entered into a database using a **form**. [1] [3]

- (b) (i) Field that uniquely identifies a record [1]  
 (ii) Prize ID [1]

(c)

Formatting	Tick (✓)	(or)	(or)
The report is grouped according to Attending			
The report is grouped according to Year Group	✓	✓	
The report is sorted according to Surname	✓		✓

Any **one** correct answer [1]

- (d) Comma Separated Variable(s) [1]

7

		AVAILABLE MARKS
9	(a) Electronic Point of Sale [1]	
	(b) Any <b>two</b> from: Printer [1], Screen/LCD/Monitor [1], Speaker/Buzzer [1] [2]	
	(c) Any <b>two</b> from: Initial capital outlay [1] Problems if break down [1] Cost of maintenance [1]/running cost [1] Staff need training [1] Delay of payment into shop owners account [1] [2]	
	(d) Any <b>one</b> from: Country of origin [1] Manufacturers code/number/ID [1] Product code/number/ID [1] Item code/number/ ID [1] Check digit [1] [1]	6



10 (a)

Online banking	Tick (✓)
Transfer money	✓
Withdraw money	
Pay bills	✓
Print cheques	

[2]

(b) Any **one** from:

Concerns about security hackers [1]

Not ICT literate [1]

Worried about details being passed on [1]

Concerns about viruses [1]

May not have necessary equipment – Internet/PC [1]

[1]

(c) Personal Identification ID Number

[1]

(d) Any **two** from:

Microchip has larger storage capacity [1]

Microchip can be edited [1]

Magnetic stripe more easily copied [1]

Magnetic stripe more easily damaged [1]

Magnetic stripe has smaller storage capacity [1]

Magnetic stripe cannot be (easily) edited [1]




[2]

AVAILABLE  
MARKS

6

11 (a)

AVAILABLE  
MARKS

Device	Magnetic or Optical?
 <p data-bbox="383 533 625 560">©iStockphoto/Thinkstock</p>	<p data-bbox="917 398 1053 432">Magnetic</p>
 <p data-bbox="395 801 638 828">©iStockphoto/Thinkstock</p>	<p data-bbox="933 694 1037 772">Optical [1]</p>
 <p data-bbox="406 1146 649 1173">©iStockphoto/Thinkstock</p>	<p data-bbox="917 996 1053 1075">Magnetic [1]</p>

[2]

(b) List following storage devices 1 – 3 in order of speed of data retrieval from fastest to slowest.

hard disc      main memory      CD ROM

1. Main Memory [1]
2. Hard disc [1]
3. CD ROM [1] [3]

(c) Any **one** from:  
 External Hard Drive [1]  
 Magnetic Tape [1]  
 Zip Disc [1]  
 USB [1]  
 CD [1]  
 DVD [1] [1]

6

12 (a) Any **one** from:  
Heat/Temperature/Moisture/Humidity [1]/thermistor [1]/  
thermometer [1] [1]

(b) Any **one** from:  
Less chance of human error [1]  
Already in format for computer to process [1]  
Can record 24/7 [1]  
Can record data in dangerous situation [1]/without human  
intervention [1] [1]

(c)

Definition	Tick (✓)
The input to the system affects the output values	
The output from the system affects the input values	✓
The output values are never affected	
The input values are never affected	

[1]

3

13 (a) Any **two** from:  
Expensive peripherals can be shared [1] data can be shared [1]  
Software can be shared [1]  
Users can logon from any computer on the network [1]  
Better security [1]  
Virus protection [1]  
Files can be backed up centrally [1]  
Communication between workstations [1]/users  
Centralised system management [1] [2]

(b) Internet is the hardware used to link into the WAN [1]  
The WWW is the web pages/data/applications which travels on  
the Internet [1] [2]

(c) Any **two** from:  
Large geographic area/small geographic area [1] linked together  
using copper/linked together using fibre optic [1]/telephone lines [1]  
Connections to LAN tend to be more permanent e.g. cables [1] [2]

(d) Any **one** from:  
Levels of access/only people with the appropriate level of access can  
access data/applications [1]  
User IDs [1] Passwords [1] Only those with the username/passwords  
can access data [1]  
Encrypt data [1] [1]

7

Definition	Term
A web address which when typed into the address bar of a browser will take the user to a website	URL
A document that can be edited and reused over and over again	TEMPLATE
The smallest element on a VDU that can be edited	PIXEL
Allows an area of the screen to be seen more closely	ZOOM
Data in a format known as binary, which consists of two digits 0 and 1	DIGITAL
An object which tracks the user’s screen position	CURSOR
A spreadsheet cell reference that does not change when copied	ABSOLUTE
A button on a web browser which shows the web sites that have been visited	HISTORY
Using a database and word processor to create personalised documents	MAIL-MERGE
To convert a document into a format for use in another package	EXPORT

[10]

QWC

**Total**

AVAILABLE MARKS
10
5
<b>100</b>

The assessment of quality of written communication.

Marks to be allocated for QWC in one of two ways.

Where QWC is to be allocated across 2 marks, the following criteria must be used:

- [2] Accurate spelling and punctuation. Some specialist terms used.
- [1] Reasonably accurate spelling and punctuation. Limited range of specialist terms used.
- [0] Question not attempted.

Where QWC is to be allocated across 3 marks, the following criteria must be used:

- [3] Highly accurate spelling and punctuation. A good range of technical terms used.
- [2] Accurate spelling and punctuation. Some technical terms used.
- [1] Reasonably accurate spelling and punctuation. Limited range of technical terms used.
- [0] Question not attempted.