

Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

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General Certificate of Secondary Education
June 2006

**INFORMATION AND COMMUNICATION TECHNOLOGY 3528/F
(SPECIFICATION B) (SHORT COURSE)
Foundation Tier**

F



Tuesday 23 May 2006 1.30 pm to 2.30 pm

<p>You will need no other materials. You may use a calculator.</p>

Time allowed: 1 hour

Instructions

- Use blue or black ink or ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.

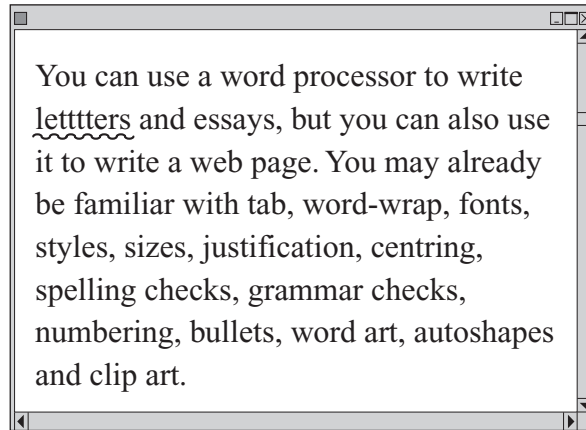
Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

For Examiner's Use			
Number	Mark	Number	Mark
1		5	
2		6	
3		7	
4		8	
TOTAL			
Examiner's Initials			

Answer **all** questions in the spaces provided.

- 1 A technician is writing a document using a word processor.
The technician has made a mistake.



- (a) (i) Tick **one** box to show which feature of a word processor would be used to identify this mistake.

	Tick one box
Type check	<input type="checkbox"/>
Spelling check	<input type="checkbox"/>
Grammar check	<input type="checkbox"/>
Range check	<input type="checkbox"/>
OCR check	<input type="checkbox"/>

(1 mark)

- (ii) Describe how the technician could correct the mistake.

.....

.....

.....

.....

(2 marks)

- (iii) Tick **one** box to show a feature of a word processor that could be used to lay out the second sentence of the document so that it is easier to read.

	Tick one box
Grammar check	
Bullets	
Centring	
Word art	
Autoshapes	

(1 mark)

- (iv) Tick **two** boxes to show features of a word processor.

	Tick two boxes
The tab key should be used to centre a heading	
Word-wrap ensures that you only have to press the <RETURN> key at the end of a paragraph	
A spelling checker can be used to check whether you have used 'there' instead of 'their'	
The space bar should be used to centre a heading	
You can use clip art to illustrate the text	

(2 marks)

- (b) The technician wants to include a bar chart in the document. The bar chart has been created in a spreadsheet.

Write the labels in order to show how a bar chart created in a spreadsheet can be included in a word processor document.

Label	
A	Paste the bar chart
B	Highlight the bar chart in the spreadsheet
C	Position the cursor in the word processor document
D	Copy the bar chart

Label

(2 marks)

2 A student has a desktop computer at home.

- (a) Tick **two** boxes to show which of the following can be used for input to a desktop computer.

	Tick two boxes
Model	
Scanner	
Mouse	
Actuator	
Modem	

(2 marks)

- (b) Tick **two** boxes to show which of the following can be used for output from a desktop computer.

	Tick two boxes
Keyboard	
Sensor	
Monitor	
Model	
Printer	

(2 marks)

- (c) The student has a PDA (Personal Digital Assistant).
Tick **two** boxes to show features of a PDA.

	Tick two boxes
A PDA is usually installed in ICT rooms	
A PDA is a portable, handheld hardware device that can fit in your pocket	
Input to a PDA is using a touch screen	
A PDA will have a larger hard disk than a desktop computer	
PDAs usually cost more to buy than desktop computers	

(2 marks)

(d) Tick **one** box to show what a PDA should be used for.

	Tick one box
To investigate whether the use of ICT is justified	
To keep a list of tasks that need doing, such as homework	
To save the only copy of your work	
To store all your passwords	
To construct a website	

(1 mark)

7

Turn over for the next question

Turn over ▶

3 A self-employed car mechanic uses a spreadsheet to calculate bills for customers.

	A	B	C	D
1	Customer's name	Mrs Jones		
2	Date	11/03/2006		
3	Credit rating	2		
4			Cost	
5	Parts	spark plugs	£24.50	
6		5 litres engine oil	£16.50	
7		air filter	£400.00	
8		pair of tyres	£68.00	
9	Labour	3 hours @ £30 per hour	£90.00	
10	VAT		£104.83	
11	Total cost		£703.83	
12				

(a) The mechanic made a mistake when entering the cost of an air filter. An air filter costs £4.00.

(i) Complete the sentence using a term from this list.

C7
A7
D8
D7
B7

The mechanic can change the cost of an air filter by editing cell
(1 mark)

(ii) Tick **one** box to show a validation check that would prevent this mistake.

	Tick one box
Allow any value	
Allow text less than 4 characters in length	
Allow a number between 0 and 50	
Allow a date between 01/01/2006 and 01/05/2006	
Allow a number between 0 and 500	

(1 mark)

- (b) Give the cell reference of **one** cell that should change automatically when the cost of an air filter is changed.

.....
(1 mark)

- (c) Cells can contain numbers or text.

Tick **one** box to show another type of information a cell can contain.

	Tick one box
Printer	
Idea	
Formula	
Folder	
Word processor	

(1 mark)

- (d) On-line help is available within the spreadsheet.

Tick **two** boxes to show what should be in the on-line help for the spreadsheet.

	Tick two boxes
A lesson on percentages so the mechanic can calculate VAT	
A road map to help the mechanic find the route to the parts warehouse	
A tutorial guide to help the mechanic use the spreadsheet	
A dictionary that helps the mechanic understand the meaning of words	
A search engine to help the mechanic find the information needed	

(2 marks)

Question 3 continues on the next page

Turn over ►

- (e) The mechanic has to buy the air filter from an on-line store.

Write the labels in order to show how the mechanic can do this.

Label	
A	Pay using a credit card
B	Enter the key words: air filter, and press the search button
C	Go to the on-line store using a web browser
D	Look at the search results and find the right air filter

Label

(2 marks)

8

- 4 The InTrains travel agency arranges trips on steam trains.
The manager of InTrains sends this e-mail to a graphic designer.



- (a) The manager has asked the graphic designer to design a poster to advertise the day trip.

Tick **three** boxes to show items of information in the e-mail that must appear in the poster.

	Tick three boxes
The trip starts in Settle	<input type="checkbox"/>
There is a special offer return price	<input type="checkbox"/>
Local advertising has been arranged	<input type="checkbox"/>
There will be entertainment for children on the train	<input type="checkbox"/>
The train is going to Dent	<input type="checkbox"/>
The train is a steam train	<input type="checkbox"/>

(3 marks)

- (b) (i) Tick **one** box to show the type of software that should be used to produce the poster.

	Tick one box
Presentation	<input type="checkbox"/>
E-mail	<input type="checkbox"/>
DTP (Desk Top Publishing)	<input type="checkbox"/>
Database	<input type="checkbox"/>
Web browser	<input type="checkbox"/>

(1 mark)

Question 4 continues on the next page

Turn over ►

- (ii) Give **one** reason why the type of software you have chosen is better than a word processor for designing a poster.

.....

.....

(1 mark)

- (c) The desktop computer system used to design the poster can print on a local A4 black and white laser printer.

Tick **two** boxes to show why the laser printer might **not** be suitable for printing the poster.

	Tick two boxes
A4 paper is too large for a poster	
Pictures are more attractive when printed in several colours	
Laser printers are inexpensive to run	
Posters have more impact when printed on very large sheets of paper	
Laser printers are reliable and have a good print quality	

(2 marks)

- (d) The poster has to be transferred from one computer to another.
Name **one** type of backing storage that could be used to do this.

.....

(1 mark)

8

- 5 A school secretary sets up a database to keep track of who owns the cars in the school car park.

- (a) Tick **three** boxes to show items of information that must be collected.

	Tick three boxes
The driver's hair colour	
The driver's name	
The car's registration number	
The driver's age	
The size of the car's engine	
How to contact the driver	

(3 marks)

(b) Design a questionnaire to collect the data.

(4 marks)

Turn over ▶

7

6 An ICT system counts people as they enter and leave a football stadium.

- (a) Tick **three** boxes to show what the ICT system would need to do to calculate the total number of people in the stadium.

	Tick three boxes
The ICT system adds one to the total when a person enters	
The ICT system adds one to the total when a person leaves	
The ICT system subtracts one from the total when a person leaves	
The total is set to zero before people are admitted	
The total is set to zero when the match starts	
The ICT system subtracts one from the total when a person enters	

(3 marks)

- (b) The stadium manager complains that the ICT system is **not** accurate.

- (i) Sometimes the ICT system shows the stadium is full when it is not, and sometimes it shows there is room for more people when there is not.

Tick **two** boxes to show possible reasons for this.

	Tick two boxes
Stewards and police on crowd control duty at the stadium are not counted	
People leave through 3 m wide doors and cannot be counted accurately	
People who have reserved seats do not attend	
The referees, linesmen and football players are not counted	
Some employees enter and leave the stadium several times during a match	

(2 marks)

- (ii) The manager tests the ICT system to find out if it is accurate.

Tick **one** box to describe a test that could be carried out to show that the ICT system is accurate.

	Tick one box
Admit only one person into the stadium and check that the total has increased by 1	
Check the total number of cups of coffee sold at half-time	
Record the exact time each person enters the stadium	
Record the exact time each person leaves the stadium	
Do not use the turnstiles	

(1 mark)

- (c) The football club keeps a record of members of the supporters' club using a database. This is a part of the database.

Member Number	Name	Season Ticket Holder	Address
01342	Johnson	No	234 Thornton Lane, Bradford
02675	Wardak	Yes	5 Leeds Gardens, Bradford
44389	Patel	No	84 Leeds Old Road, Huddersfield
82300	Shoard	Yes	156 Bolton Road, Halifax
98763	Smith	Yes	31 Pudsey Avenue, Leeds

- (i) Write down the **Name(s)** in the record(s) selected using this search condition:

Search Condition: **Season Ticket Holder** is No

Name(s) in the record(s) selected:
(1 mark)

- (ii) Give **one** reason why the manager might want to identify those members who do **not** have season tickets.

.....
.....
(1 mark)

8

Turn over for the next question

Turn over ▶

7 A college has a ground floor computer room with windows at the back of the building overlooking a car park. The computer room has a door that opens into the foyer just opposite the main door of the building. A moderately busy main road with some parking restrictions runs past the main door.

- (a) (i) Tick **three** boxes to show security precautions that could be taken to prevent the theft of hardware.

	Tick three boxes
Open a cyber café in the foyer	
Redevelop the car park at the back of the building to make it more difficult to get to the computer room windows	
Arrange an Open Day so the general public can look round the computer room	
Put reflective security foil on the windows to stop people looking into the computer room and to make it harder to break the windows	
Remove parking restrictions on the main road so that it is easier to park	
Make sure there is always a security guard in the foyer	

(3 marks)

- (ii) Describe **two** other security precautions that could be taken to prevent the theft of hardware.

Security precaution 1:

.....

Security precaution 2:

.....

(2 marks)

- (b) In the computer room, the computers connect to a wireless LAN (Local Area Network) and the Internet.

Tick **two** boxes to show security precautions that could be taken to protect software and data.

	Tick two boxes
Open a cyber café in the foyer and allow customers to connect to the wireless LAN	
Ensure users have an authorised username and password before allowing them to connect to the wireless LAN	
Encrypt all the data on the wireless LAN	
Allow guest access using a widely known username and password	
Make sure there is always a security guard in the foyer	

(2 marks)

7

Turn over for the next question

Turn over ▶

- 8 Some people live in small and remote villages where there are few shops or banks. Discuss the advantages **and** disadvantages of on-line shopping and banking to these people.

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(7 marks)

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END OF QUESTIONS