

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

Information and Communication Technology

Unit 1: Living in a Digital World

Monday 13 June 2011 – Afternoon

Time: 1 hour 30 minutes

Paper Reference

5IT01/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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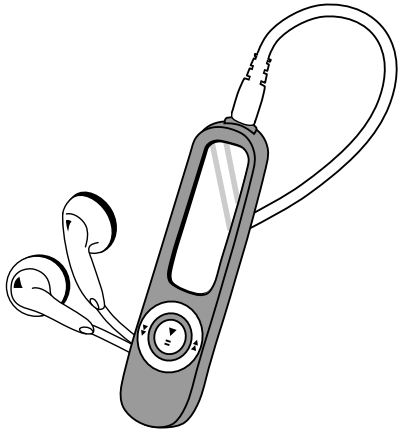

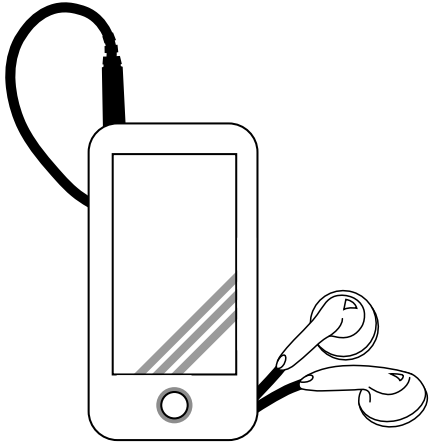
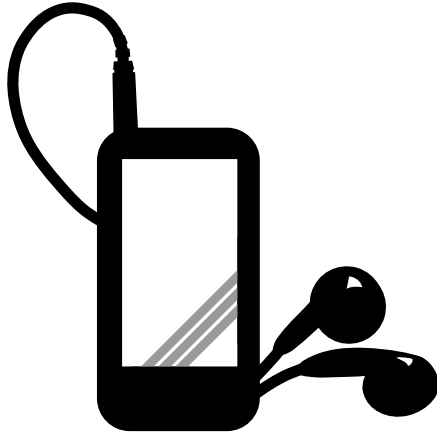


Answer ALL questions.

Laura and Shameela are friends. They use digital devices to listen to their favourite bands and to watch music videos. They are going to a Hi-Riderz concert at City Arena.



Use this information to answer Question 1 (a).

Personal Media Player A		Personal Media Player B	
			
Interface	Jog Wheel	Interface	Remote
Connectivity	USB 1.0	Connectivity	USB 2.0
Storage	500 MB	Storage	64 GB
Screen Resolution	320x240	Screen Resolution	400x240
Personal Media Player C		Personal Media Player D	
			
Interface	Multi-function button	Interface	Touch screen
Connectivity	Bluetooth	Connectivity	WiFi
Storage	160 GB	Storage	320 GB
Screen Resolution	1280x720	Screen Resolution	640x480



Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 Laura wants to buy a new personal media player.

(a) (i) Which **one** of these has the highest screen resolution?

(1)

- Personal Media Player A
- Personal Media Player B
- Personal Media Player C
- Personal Media Player D

(ii) Which **one** of these provides the fastest **wired** connection?

(1)

- Personal Media Player A
- Personal Media Player B
- Personal Media Player C
- Personal Media Player D

(iii) Which **one** of these can store the most data?

(1)

- Personal Media Player A
- Personal Media Player B
- Personal Media Player C
- Personal Media Player D



(b) Many personal media players offer security features.

Give **two** of these.

(2)

1

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2

.....

(c) Laura buys a personal media player. She can now watch videos 'on demand'.

(i) Give **one advantage** to Laura of streaming rather than downloading videos.

(1)

.....

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(ii) Give **one disadvantage** to Laura of streaming rather than downloading videos.

(1)

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(d) Laura wants to connect her personal media player to her television.

Which connection type would allow this?

(1)

A Serial

B Infrared

C PS/2

D HDMI



(e) Laura connects her personal media player to her laptop.

She sees this:



The update includes a security fix for the software.

Give **two** other reasons for a software update.

(2)

1

2

(f) List **two** peripheral devices Laura could use with her personal media player.

(2)

1

2

(g) Laura likes to use her personal media player when she goes running.

List **two** features of personal media players that make them suitable for this.

(2)

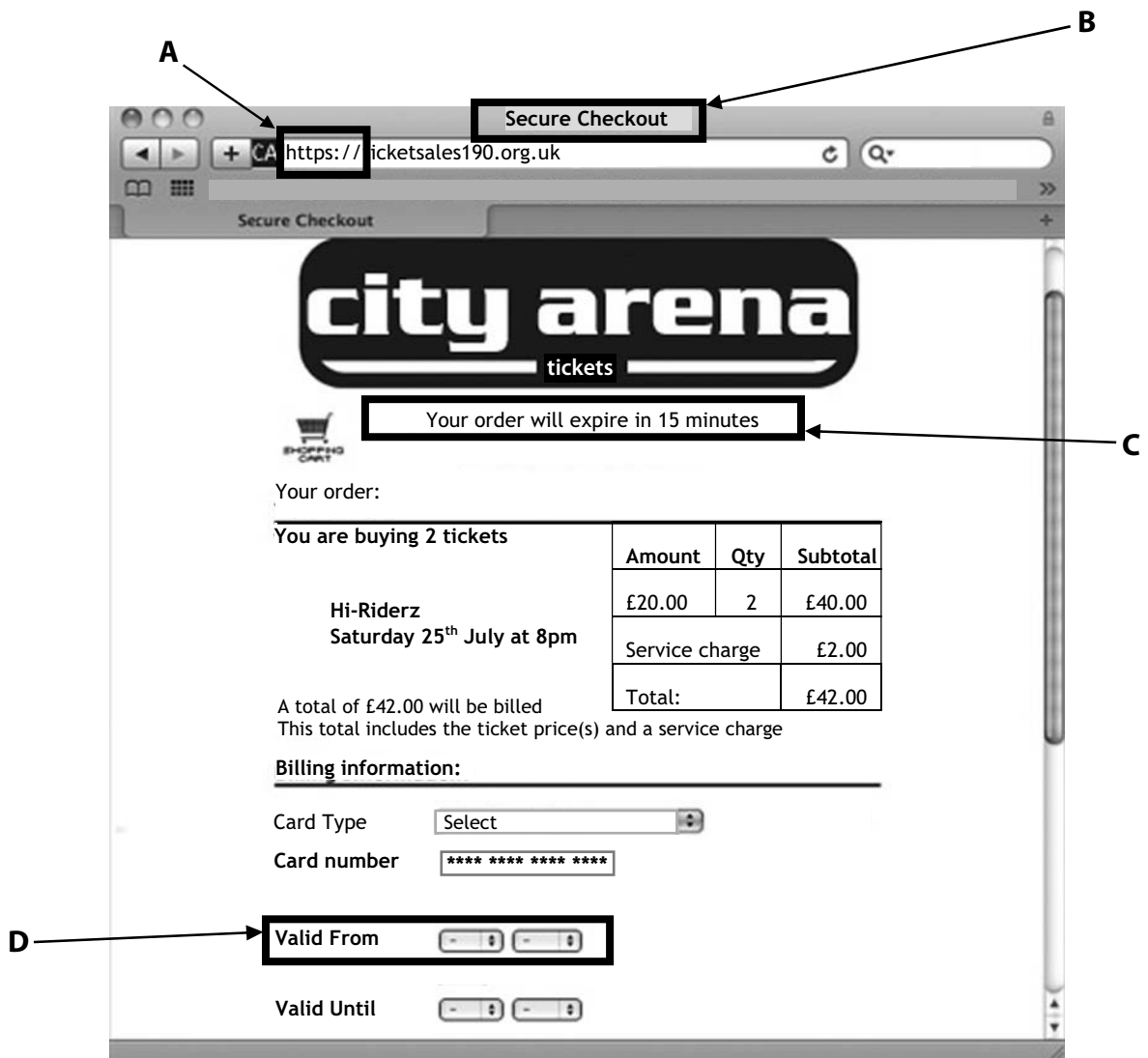
1

2

(Total for Question 1 = 14 marks)



- 2 Laura and Shameela are going to a Hi-Riderz concert at the City Arena.
 Laura buys e-tickets using this booking screen.



- (a) (i) Four areas of the booking screen have been labelled A, B, C and D.

Which **one** identifies that the site is safe to use?

(1)

- A
- B
- C
- D



(ii) Which **one** of these processes is used to improve security on the booking system?

(1)

- A Deleting
- B Encryption
- C Phishing
- D Reporting

(iii) The booking screen displays Laura's card number like this:

Card number * **** * * * * * * * * * *

Explain why the card number is displayed like this.

(2)

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(iv) State **two** benefits to Laura of buying tickets online.

(2)

1

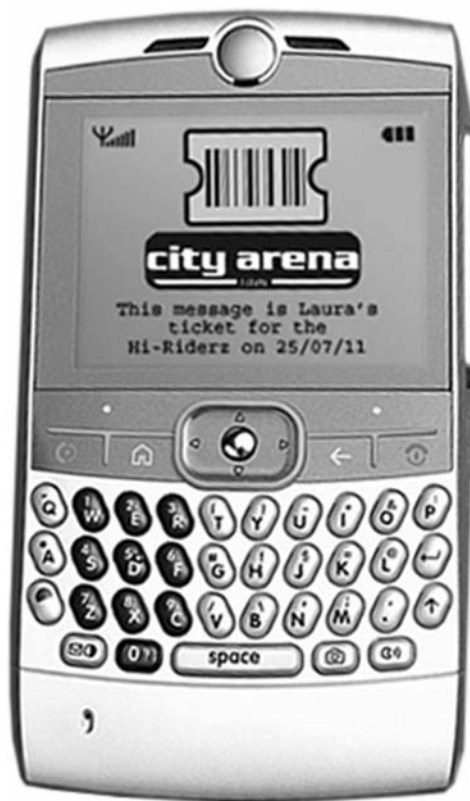
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2

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(b) Laura receives this e-ticket on her smart phone.



(i) Which **one** of these would have been used to send the e-ticket?

(1)

- A SMS
- B MMS
- C GPS
- D FPS



City Arena uses e-tickets rather than paper tickets.

(ii) State **two** benefits **to City Arena** of using e-tickets rather than paper tickets. (2)

1

2

(iii) State **two** drawbacks **to Laura** of using e-tickets rather than paper tickets. (2)

1

2

(iv) Which feature of the e-ticket will City Arena use to allow entry? (1)

- A Event date
- B Customer name
- C Arena logo
- D Barcode

(v) The e-ticket is saved to Laura's phone memory.
Explain **one** benefit **to Laura** of having the e-ticket saved in her phone's memory. (2)

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(Total for Question 2 = 14 marks)



3 Shameela is driving to City Arena.

(a) She can connect her smart phone to her car stereo.

Which **one** of these could she use to wirelessly connect the devices?

(1)

- A USB
- B Bluetooth
- C HTTP
- D GSM

(b) (i) Shameela has a sat nav device in her car. Sat nav devices use GPS.

State the function of GPS.

(1)

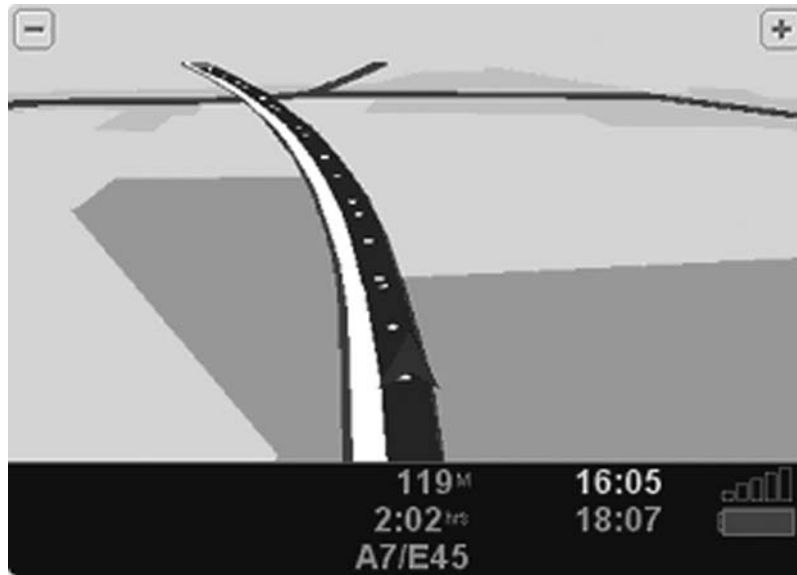
(ii) Shameela has City Arena's location bookmarked in her sat nav.

State why bookmarking the location helps her.

(1)



(iii) When Shameela drives through a tunnel she notices that the display 'freezes' on her sat nav.



State what might have caused this.

(1)

(iv) Describe **one** health and safety risk of using a sat nav when driving.

(2)

(v) Laura has printed directions to City Arena.

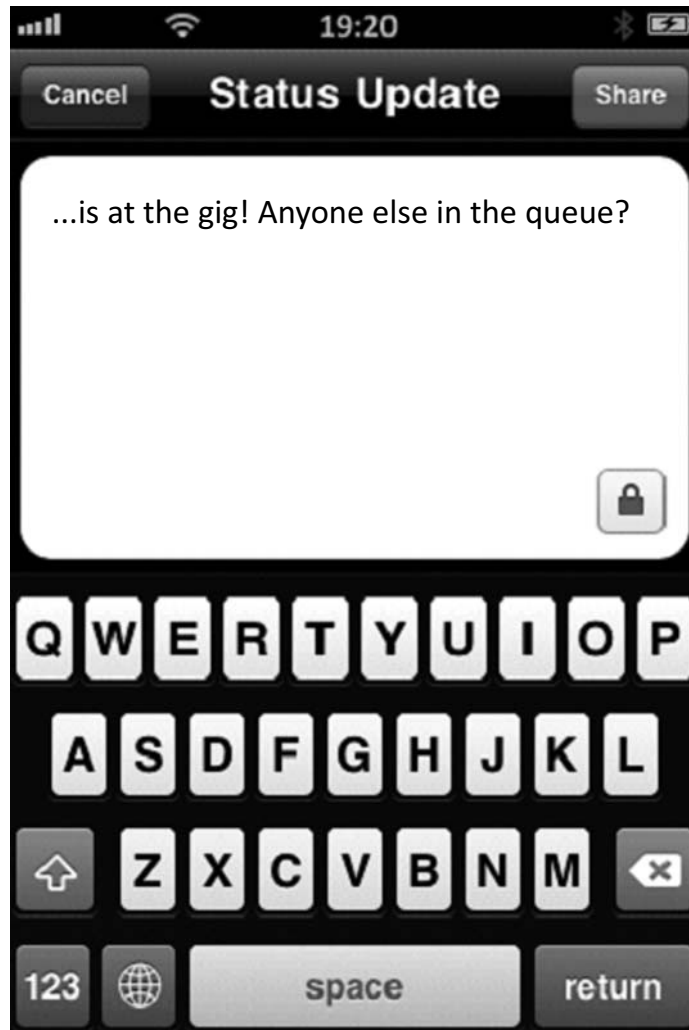
Give **two** benefits of using a sat nav rather than printed directions.

(2)

- 1
- 2



(c) Laura and Shameela arrive at City Arena for the Hi-Riderz concert.
Shameela wants to let her friends know they have arrived.
She uses her smart phone to update her social network status.



(i) State what 'social networking' is.

(1)



(ii) Identify **two** advantages, to Laura, of using social networking technology rather than SMS to communicate with her friends.

(2)

1

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2

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(iii) State **one** way that Laura can control who can view her social network profile.

(1)

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(d) (i) Hi-Riderz use social networking sites.

State **one other** type of online community that Hi-Riderz could use.

(1)

(ii) Describe how Hi-Riderz might use this other type of online community to communicate with their fans.

(3)

(Total for Question 3 = 16 marks)



4 Hi-Riderz perform at City Arena.



(a) A guest singer uses the internet to perform live with the band using VoIP.

What is VoIP?

(1)

- A A wireless microphone processor
- B A method of sending audio data
- C A high speed internet connection
- D A digital audio auto-tuner effect

(b) The lead singer uses a wireless microphone.

State **two** causes of poor signal quality when using wireless connections.

(2)

1

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2

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(c) The performance is shown on big screens in the arena.

Explain the problems that could be caused by signal latency.

(2)

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(d) The band watches a video of their recording after the show.

(i) Identify **two** optical media types they could use to store the video recording. (2)

1

2

(ii) Explain the differences between them. (2)

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(e) After the event, songs will be distributed on the internet.

(i) Explain why the mp3 format is suitable. (2)

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(ii) State **one** disadvantage to the listener of using the mp3 format. (1)

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*f) Some companies sell music and video as downloads rather than physical products.

Discuss the effects this has on customers and musicians.

(6)

Area with horizontal dotted lines for writing the answer.

(Total for Question 4 = 18 marks)



5 When Laura gets home from City Arena, she buys a Blu-ray disc of the band's performance from an online store.

(a) (i) Which feature of Blu-ray discs makes them suitable for high definition video?

(1)

- A Speed
- B Storage space
- C Seek time
- D Scratchproof

(ii) Explain why a Blu-ray disc will not play on a DVD player.

(2)

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(iii) When Laura plays the disc, she is given the option of viewing online content.

Other than her Blu-ray player and television, state **one** piece of equipment Laura will need to view this online content.

(1)

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(iv) The disc uses copy protection technology.

Explain why this is needed.

(2)

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(b) Laura starts to receive personalised emails from the online store with offers on discs from similar bands.

(i) Explain why the online store sends Laura the emails.

(2)

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(ii) Describe how the online store is able to do this.

(2)

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(iii) Laura does not want to receive these emails.

State **two** ways that she could prevent them from reaching her.

(2)

1

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2

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* (c) Laura has many online accounts.

She uses them to shop and communicate with friends.

Discuss the privacy concerns associated with individuals' use of the internet.

(6)

Area with horizontal dotted lines for writing the answer.

(Total for Question 5 = 18 marks)

TOTAL FOR PAPER = 80 MARKS



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