

Chapter - 6
ICT applications

1. Tick whether these statements are **true** or **false**.

	true	false
Booking a theatre ticket is an example of online processing.		
Producing utility bills is an example of online processing.		
An internet browser is used by web designers to test web pages.		
An internet browser uses an inference engine.		

[2]

2. Describe **three** types of medical aid which can be produced using a 3D printer.

1

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2

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3

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[3]

3. (a) Explain what is meant by GPS.

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..... [3]

(b) Give **two** examples of the use of GPS.

1
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2
..... [2]

4. Doctors often use expert systems to diagnose illnesses of patients.

(a) Describe how an expert system diagnoses illnesses.

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..... [4]

6. The following diagram shows towns A and B and the two roads that connect them.



Describe how a satellite navigation system (sat nav) in a motor vehicle would calculate the quickest route from A to B.

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[4]

7. Ffiona wants to communicate with her friend Myfanwy using her mobile phone.

Describe **four** ways she could do this.

- 1
- 2
- 3
- 4

8. Internet banking can be used by bank customers to check their account balance.

(a) Many ways of logging into such a system involve the use of passwords.

Describe **three** methods of minimising the possibility of passwords being misused if intercepted.

1

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2

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3

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[3]

(b) Describe **three** benefits to customers of using internet banking.

1

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2

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3

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[3]

9. A ferry connects two countries. When car drivers approach the ferry they have to check in to confirm the details they have already booked. If they drive in to the self check-in lane, details of the car are automatically input to a computer. The terminal which is used for the driver to identify themselves produces a personalised welcome message on a screen. There is a database which contains details of the driver and the car.

(a) Write down the data which is automatically input to the computer.

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..... [1]

(b) Other than your answer to (a) give **two** items of data stored in the computer database.

1

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2

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[2]

(c) Explain how Optical Character Recognition is used before the computer processes the data.

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(d) Explain the computer processing which takes place to produce the personalised message.

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..... [3]