

ICT BTEC Level 1/Level 2 First Unit 1: The Online World

Name:

Form: **10**

1. Which **one** of the following is an online commerce service?

- Train timetable Online auction website Online tax return E-voting website

(1 mark)

2. Which **one** of the following is an online business service?

- Retail websites VLE Online tax return Collaborative working

(1 mark)

3. Why might a website owner and an advertiser want to be involved with an affiliate model of online advertising? Give **one** reason for each.

.....
.....

(2 marks)

4. Describe how an algorithm and index are used in file compression.

.....
.....

(2 marks)

5. Why is backing up files important? Identify two reasons from the list below.

- If files become corrupt
 If files are accidentally deleted
 Makes writing and editing easier
 Makes files easier to find
 So you can access them anywhere

(2 marks)

6. Which **two** of these are levels of access to files?

- Write Read Read/write Read/view View

(2 marks)

7. Virtual Learning Environments (VLEs) are used in schools, colleges and universities.

(a) Give **two** benefits of using a VLE for learners.

.....
.....

(2 marks)

/12 marks

(b) Give **two** benefits of using a VLE for teachers.

(2 marks)

8. There are advantages and disadvantages to social networking and instant messaging

Draw a line to the correct side – Advantage or Disadvantage

Advantages		Disadvantages
	May lead to misunderstandings	
	Needs internet access	
	Able to do video conferencing	
	Viruses could spread	
	Cheap to use	
	Able to communicate in real time	

(5 marks)

9. As business is working with a supplier based in another country.

Why might they be reluctant to use online VoIP for the weekly meetings? Choose **one** answer from the following options.

- It is more expensive
- The quality isn't always reliable
- They will need to hire a separate venue
- They want to be able to use video

(1 mark)

10. (a) Explain how data is stored in cloud computing.

(2 mark)

(b) Explain how data is stored in installed software.

(2 marks)

11. Describe **one** use of RFID chips in a high street retail shop. State **one** benefit their introduction could bring.

(2 marks)

/14 marks

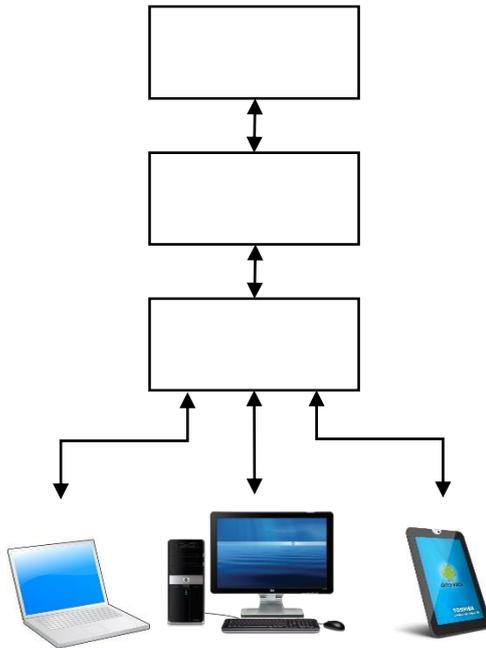
12. Match the correct hardware to the definition.

- | | |
|--------|--|
| Client | Powerful computer that controls the network |
| Server | Device which directs traffic over a network |
| Router | A user's device such as a laptop or smartphone |

(3 mark)

13. This network diagram show the access points involved in connecting the client so they can access the internet.

Correctly fill the terms with **PoP**, **NAP** and **internet** in the diagram below. :



(3 marks)

14. Choose the best internet connection for each of these people from the options below. Types of internet connection:

- Broadband
- Wireless
- Dial-up

Rosie lives in an isolated farmhouse.	
Paulo lives in a city apartment.	
Rachel lives on the outskirts of the city and travels into the city on the train every day working while she travels.	

(2 marks)

15. Explain the role of network protocol.

(2 marks)

/10 marks

16. Describe what a hyperlink is and what it does.

(2 marks)

17. Write the HTML to create a hyperlink to www.penguins.com where the user would click on the text "Click here to see more penguins".

(2 marks)

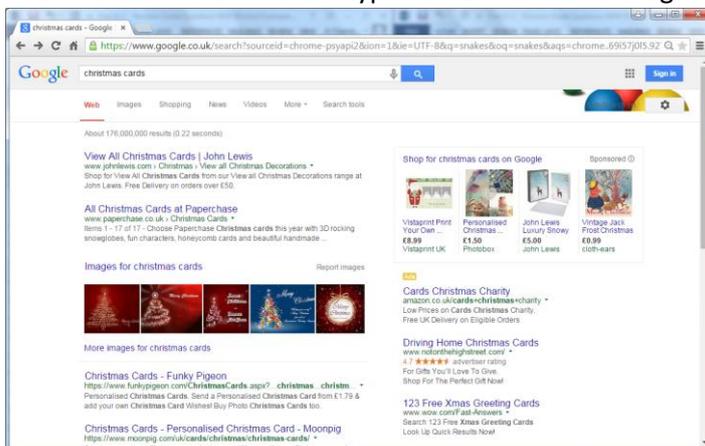
18. Label the three parts of this URL and draw the brackets to show how the URL divides into these three parts.

<http://www.edexcel.com/btec/btecfirst/specification.pdf>

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(3 marks)

19. Describe the three different types of results in this image.



(3 marks)

20. Identify **three** parts of an email which may indicated it is a phishing email.

(3 marks)

21. Explain the 'store and forward' system for email.

(2 marks)

22. Explain how packet switching works.

(2 marks)
/17 marks

23. Chose a transmission mode for the devices below and explain your choice. The first one has been done for you.

Device	Transmission Mode	Explanation
Control system on a production line	Half-duplex	Signals go in both directions to monitor and send instructions. They do not need to go at the same time.
Mouse connecting to a computer		
Smart phone synching to a computer		

(4 marks)

24. A school has used STP to connect computers in their classrooms to the network. Give **two** reasons why they have chosen this type of cable.

(2 marks)

25. Explain **one** advantage of connecting to the internet wirelessly.

(2 marks)

26. Which **one** of these processes is more likely to occur on the client's processor?

Mini games Login form Paying by credit card Web page

(1 mark)

27. Identify which of these statements are about client-side processing and which are about server side processing?

(a) Processing happens on the user's device.

Client Server

(b) Processing happens on the web server.

Client Server

(c) The web page appears the same no matter what browser the user is using.

Client Server

(d) There is less change of interference by hackers as data is not moving across the internet

Client Server

(e) The processor may run slowly if too many users are accessing it at the same time.

Client Server

(f) The web page is downloaded before it is processed.

Client Server

(6 marks)

/15 marks

28. Suggest an appropriate data type for each of these fields.

Field	Description	Datatype
Age	Current age of the customer.	
Previous?	If the customer has bought something from us before.	
Post code	Post code of the customer	

(3 marks)

29. Select **two** reasons why a company might use a database.

- Easy to search for specific records
- Only one user can access the data at a time
- Easy to add new records, although difficult to edit them.
- More secure than paper records
- Records can be deleted easily

(2 marks)

30. Complete this text to show why security is important.

A business does not have adequate security.

- There is a risk that information might be stolen.
This information is known as
- Competitors may use this to create their own inferior version of a product.
This could lead to mistrust.
- This may damage the company's
- Ultimately this could lead to loss of

(3 marks)

31. Explain the purpose of a firewall.

.....
.....

(2 marks)

32. Carla uses a social media website and has started chatting regularly to a user called Tom. It looks like they have a lot in common and he has sent her photographs of himself. He has recently suggested that they meet for a coffee, as they live quite close to each other. Describe the **two** potential risks of this situation and describe what Carla should do.

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.....
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.....
.....
.....
.....

(6 marks)
/16 marks