

Retired Online Test Version 3 Unit 1: The Online World

BTEC Firsts Level 1/2 Information and Creative Technology

Introduction



This retired onscreen test has been made available to centres to help you prepare your learners for their BTEC Firsts Level 1/2 external assessments.

We recommend that you use this test as a written assessment which is then either teacher marked or peer assessed.

This retired test should be used in conjunction with the Mark Scheme and the Lead Examiner's Report to clearly identify the assessment requirements. These documents are available at:

<http://www.edexcel.com/quals/firsts2012/information-and-creative-technology/Pages/default.aspx>

Retired Test Development



We are currently working towards a simulation test where mock onscreen tests can be taken in a real environment. However as this is being developed, we have temporarily created these PowerPoint based tests to support you.

How can I view the videos in the test?

This document has been produced using screen captures of the retired onscreen test. As such, videos are not available in this PowerPoint document. This document should be used in conjunction with the retired onscreen test which is available on the website: <http://www.edexcel.com/quals/firsts2012/information-and-creative-technology/Pages/default.aspx>

How can I see the drop down menus in the test?

Where a drop down menu may obscure information the learner requires to answer a question, we have instead supplied a text box containing the options from the drop down menu. To view drop down menus please use the retired onscreen test.

Question 1/18

Almira is travelling to Spain to visit family.
She needs to check her flight time online.

Which type of online service would she use? (1)

Click on **one** of the boxes.

Entertainment

Download services

Real-time information

Communication

Question 2/18

Identify **two** protocols used for email communications. (2)

Click on the **two** correct protocols.

TCP

SMTP

FTP

POP3

IP



Question 3/18



Brian has been set work for the holidays by his teacher but was not present to collect the Assignment Brief. Brian will use a Virtual Learning Environment (VLE) to access the Assignment Brief and submit his work.

(a) Give **one** other way the VLE will help Brian to complete the work. (1)

Type your answer in the box.

(b) Give **one** disadvantage to the teacher of receiving Brian's work through a VLE. (1)

Type your answer in the box.

Question 4/18

Jon wants to connect to the internet from home.

(a) Identify the software Jon needs to access the internet. (1)

Click on **one** of the boxes.

Uniform Resource Locator

Internet Service Provider

Internet browser

Search engine

Jon needs access to a web server to use the internet.

(b) Identify **one** role of a web server. (1)

Click on **one** of the boxes.

Displays multimedia content

Hosts HTML documents and files

Searches for content using HTTP

Creates a unique address for files

Question 5/18

Packet-switched networks transmit data in small blocks called packets.
The internet is an example of a packet-switched network.

The animation shows the packet switching process.

Identify **two** components of a network packet. (2)

Click on the **two** correct components.

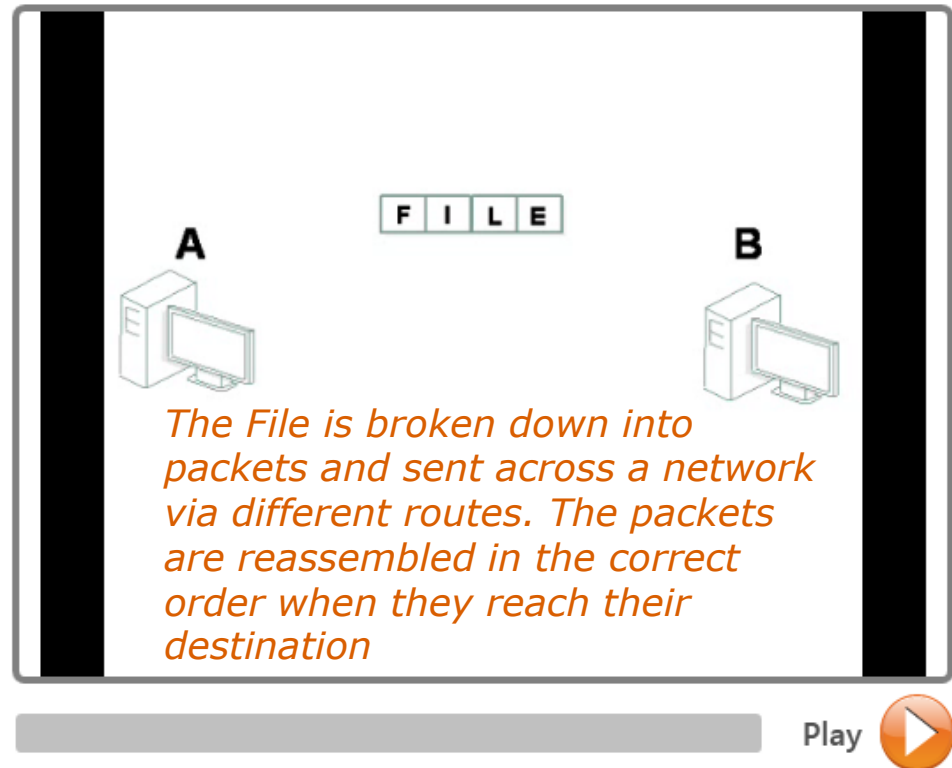
Header

Memory


Router

Frame

Trailer



The diagram shows two computers, A and B, connected by a network. A file is shown being broken down into packets. The text below the diagram reads: "The File is broken down into packets and sent across a network via different routes. The packets are reassembled in the correct order when they reach their destination".

Play 

Question 6/18

Andrew prefers playing online multi-user computer games rather than single-user games.

Identify **two** reasons why online multi-user games are popular. (2)

Click on the **two** correct reasons.

Other players are available at any time

The graphics are always high quality

They allow players to communicate with each other

There are no age restrictions on purchasing games

All games are in 3D

Question 7/18



Suni is going travelling abroad for six months.

(a) Give **two** advantages to Suni of using online social networking websites to communicate with her family and friends at home.

(2)

Type your answer in the box.

(b) Give **two** precautions that Suni should take to reduce the risks of using online social networking websites.

(2)

Type your answer in the box.

Question 8/18

Data validation is used to ensure that input data matches pre-defined criteria. There are a number of validation types that can be used to check data.

Identify the validation type that checks that data has been entered. (1)

Click on **one** of the boxes.

Range check

Format check

Presence check

Check digit

Question 9/18



Helen works from home and has three teenage children.
She is considering having fibre optic broadband installed.

Explain **one** advantage to Helen of having fibre optic broadband installed. (2)

Type your answer in the box.

Question 10/18



Benji uses instant messaging to chat to his friends.

Identify **two** features of instant messaging. (2)

Click on the **two** correct features.

Virus checking is carried out automatically

Messages are sent and received in real-time

Users can include web links

All messages are transmitted securely

Inappropriate messages are monitored

Question 11/18



Aleem is concerned that when using the internet he could become a victim of phishing.

Identify **two** measures Aleem should take to reduce the risk of phishing. (2)

Click on the **two** correct measures.

Only email financial information when requested

Save all email attachments to his desktop

Use a firewall and anti-virus software

Check web links from pop-ups in his browser

Only use https web pages for online transactions

Question 12/18



Internet Message Access Protocol (IMAP) is one of the standard protocols for accessing email from a remote server.

Explain **two** advantages of using IMAP to access your emails. (4)

Type your answer in the box.

Question 13/18

Data encryption is vital when protecting online data.

Identify **two** techniques for data encryption. (2)

Click on the **two** correct techniques.

Symmetric encryption

Cipher encryption

Asymmetric encryption

Plain text encryption

Password encryption

Question 14/18



It is important to back up your data so that it can be reinstated if lost or damaged.

Explain **two** advantages of using an online storage facility to back up data. (4)

Type your answer in the box.

Question 15/18



The 'store and forward' model is used to send emails.

Explain **two** disadvantages of the 'store and forward' model. (4)

Type your answer in the box.

Question 16/18

Large files can be compressed to make uploading and downloading faster.

(a) Explain how text files are compressed. (2)

Type your answer in the box.

(b) Explain how image files are compressed. (2)

Type your answer in the box.

Question 17/18



Anti-virus software is used to protect data from viruses.

Explain how anti-virus software works. (2)

Type your answer in the box.

Question 18/18



Longbridge School wants to introduce a Database Management System to improve the analysis and reporting of pupils' data.

Evaluate whether the school should implement a Database Management System. (8)

Type your answer in the box.