OCR GCSE (J277)

Module F: The internet

Workbooklet · 2 parts · 40 marks

F3-F5 are IGCSE (Cambridge) only and not on J277.

Contents

Part	Topic	Marks
F1	The Internet: a worldwide collection of networks	20
F2	URLs, DNS and how a web page reaches your screen	20
	Total	**40**

MODULE F THE INTERNET · F1

The Internet: a worldwide collection of networks

Original practice questions · 20 marks · ~25 minutes · OCR J277 spec 1.3.1 (with 1.3.2 protocols)

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **20 marks**.

1

Total: 3 marks

(a) Tick (✓) **one** box to show which statement describes the Internet. **[1]**

Statement	Tick (✓)
A single network that is owned by one company	
A worldwide collection of computer networks	
A network that covers one building or one site	
A program that is used to display web pages	

(b) The Internet is often described as "a network of networks". **[2]**
State what this means.

2 Total: 5 marks

Complete the paragraph about the Internet. Use words from the list. Not all words are used. **[5]**

LAN · local · NIC · protocols · router · switch · transmission · WAN · websites · worldwide

The Internet is a ..... collection of computer networks. An organisation's ..... in one building is connected to the Internet using a ..... . Data travels between networks through ..... media, such as fibre-optic cables. Devices on different networks can communicate with each other because they all follow the same ..... , such as TCP/IP.

3 Total: 4 marks

Tick (✓) **one** box in each row to show whether each statement is true or false. **[4]**

Statement	True	False
The Internet is a type of LAN.		
Data sent across the Internet may pass through several routers on its way to its destination.		
A client can only request a web page from a web server that is in the same building as the client.		
Data sent across the Internet can travel through both wired and wireless transmission media.		

4 Total: 2 marks

A furniture business has a workshop in one town and a showroom in another town 80 km away. Each site has its own LAN. Both LANs are connected to the Internet.

(a) Staff at the business use the Internet to view web pages. **[2]**
Give **two other** services the business could use over the Internet.

1

2

5 **Total: 6 marks**

This question is about the furniture business in Question 4.

(a) A designer in the workshop sends a large design file to a computer in the showroom. Explain how the Internet allows the file to reach the computer in the showroom. **[4]**

(b) One day the showroom's connection to the Internet stops working. Staff in the showroom cannot send files to the workshop. They can still print from the showroom computers to the printer in the showroom.
Explain why they can still print. **[2]**

Total for this worksheet: 20 marks

MODULE F THE INTERNET · F2

URLs, DNS and how a web page reaches your screen

Original practice questions · 20 marks · ~25 minutes · OCR J277 spec 1.3.1

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **20 marks**. All businesses on this sheet are made up.

1

Total: 2 marks

(a) State what the letters **DNS** stand for. **[1]**

(b) A DNS converts a URL into another type of address. State this type of address. **[1]**

2

Total: 4 marks

(a) Tick (✓) **one** box in each row to show which device each description matches. **[4]**

Description	Web server	Client	Domain Name Server
Stores the files that make up a website			
A laptop using a web browser to view a page			
Finds the IP address that matches a URL			
Sends web pages to the devices that request them			

3 Total: 4 marks

A furniture repair business has made a website. The business pays another company to host the website.

(a) Describe what is meant by **hosting** a website. **[2]**

(b) A customer views the business's website on a smartphone. Explain why the smartphone is a **client** in this situation. **[2]**

4 Total: 6 marks

(a) Tick (✓) **one** box in each row to show whether each statement is true or false. If a statement is false, rewrite it so that it is true. **[6]**

Statement	True	False	Rewritten statement (if false)
A DNS is one single server that stores the IP address of every website.			
A Domain Name Server stores a table of domain names and their matching IP addresses.			
The DNS sends the web page to the client.			
A web server stores web pages and sends them to clients that request them.			

5 **Total: 4 marks**

An office worker at a ferry company enters the URL of a supplier's website into a web browser. The first Domain Name Server that receives the request does **not** have the IP address for this URL.

(a) Describe how the IP address can still be found and what happens to it once it is found. **[4]**

Total for this worksheet: 20 marks