# Networks and the effects of using them – 2021/20 IGCSE 0417

1.

Nov/2021/Paper_11/No.7
Bluetooth is a method of communication to connect devices together.
Describe how a smartphone can use Bluetooth to connect to another device.
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	organisation uses the internet and an intranet.
(a)	Explain how the purpose of the internet differs from the purpose of an intranet.
	[4

Employees in the organisation are allowed to access the intranet using their smartphones.

The employees are required to secure their smartphones using either facial recognition, passwords or voice recognition.

(b) Tick (✓) whether the following statements refer to facial recognition, password or voice recognition.

202	Facial recognition (✓)	Password (✓)	Voice recognition (✓)
This method cannot access the smartphone unintentionally			
The accuracy of this method can be affected by noise			
This method requires the use of the smartphone's camera			
This method could be compromised by shoulder surfing			

[4]

		Write down the most appropriate network device to match the following statements. Your answers should be different in each part.			
	(a)	This network device checks the data packet arriving from one computer and sends the data to a specific computer.			
		[1]			
	(b)				
		[1]			
	(c)	This network device connects a LAN to the internet.			
	. D	[1]			
	(d)	This network device connects one LAN to another with the same protocol.  [1]			
4.	Nov	/2021/Paper 12/No.5			
	devi via a seci	Internet of Things (IoT) is a computer network which allows users to control household ices remotely. It has many benefits, for example a user can turn on the house central heating a smartphone. The IoT can use WiFi and Bluetooth which can cause problems regarding data urity.			
	Des	cribe the methods that could be taken to protect the user's data.			
		.00			
		<b>100</b>			

3.

Nov/2021/Paper\_12/No.4

pur	purchase the car on the website.					
(a)	Describe <b>two</b> other features of internet shopping.					
	[2]					
(b)	Discuss the benefits and drawbacks of using internet shopping for Rockit Motors.					
	<u> </u>					
	F01					
	[6]					

Rockit Motors recently created a new car sales website. The website uses internet shopping features. Customers can ask questions of the virtual salespeople on the website, and then

**5.** Nov/2021/Paper\_12/No.7

	(c)	Before the website became operational it needed to be tested. The web designer created a test plan including module and whole system testing.
		Explain the difference between module and whole system testing.
		[4]
<b>5</b> .	Nov	/2021/Paper_12/No.13
<b>J.</b>		internet has both moderated and unmoderated forums.
	Ехр	lain what is meant by a moderated forum.
		<b>A</b>
	•••••	
		F43
		[4]

Explain what is meant by an unmoderated forum.
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**7.** Nov/2021/Paper\_13/No.6

The internet has both moderated and unmoderated forums.

8.	Mar	/2021	/Paper	12	/NIA	10
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Computer data can be stored on physical storage devices. Data can also be stored in the 'cloud'.

(a) Explain what is meant by the cloud, giving **two** advantages of storing data in the cloud compared with physical storage devices.

Explanation	
Advantage 1	
Advantage 2	, 70

(b) Tick (✓) whether the following storage devices are examples of optical, magnetic or solid state storage.

20	optical (√)	magnetic (√)	solid state (√)
Flash drive			
Hard disk drive			
Blu-ray disc drive			
SSD			

[4]

7.	June/2021/Paper_11/No.6
	You have been asked by the secretary of a soccer club to create a website to publicise its results,
	fixtures and other events.

When the website has been created it has to be published on the internet. You plan to upload it onto the internet using FTP.

(a)	Explain what is meant by FTP.	
		[2]
		[2]
(b)	Explain how to upload and publish the content of a website using FTP.	
		[4]

(c) Before the website is published it needs to be tested.

Write down **three** different features of the web pages that could be tested. For each feature, describe the method you would use to carry out the test.

Feature 1
Method
Feature 2
Method
Feature 3
Method

[6]

10.	June/2021/Paper_11/No.8	
	Compare and contrast the features of a switch and a hub.	
	***	
		[6]
11	June /2021 / Paner 12 / No 0	
11.	June/2021/Paper_12/No.9	
	(a) Describe two uses of a company intranet.	
	1	
	2	
	***	
		ເວາ
		[2]

(b)	Social networking is used to communicate with friends; this is one use of the internet.	
	Describe <b>four</b> other uses of the internet.	
	1	
	2	
	3	
	4	
		F41
	oacannoi.	[4]
	Palpa	

(c)	A major part of the everyday use of the internet is social networking. Currently some so networks are not policed. The owners of a website have full discretion on what materi removed and what is allowed to be kept.	ocial al is
	Discuss the benefits and drawbacks of policing social networking sites.	
	20	
	(3)	
	<b>10</b> ,0,1	
		[8]

## **12.** June/2021/Paper\_13/No.5

Complete the sentences using the most appropriate item from the list.

blog	cookie	email	fax	
search engine	social media	web browser	wiki	
A piece of software t				[4]
A personal internet j				[1]
			called a	[1]
	Palpaci			[1]
	search engine  A piece of software t  A personal internet j	search engine social media  A piece of software that allows a user to display the social media  A personal internet journal is called a  A web application that allows a group of personal internet journal is called a	search engine social media web browser  A piece of software that allows a user to display a web page is called  A personal internet journal is called a	search engine social media web browser wiki  A piece of software that allows a user to display a web page is called a  A personal internet journal is called a  A web application that allows a group of people to edit the content is called a

13.	A fa	/2021/Paper_13/No.7 mily has purchased a wireless router for use in their home to allow their devices to be connected WiFi to form a wireless local area network (WLAN).
	(a)	When the family purchased the wireless router they were advised to change the default password.

	Explain why they should change the default password.	
		[2]
(b)	Describe the process of using WiFi to connect to a WLAN.	
	~00	
		[4]

### **14.** Nov/2020/Paper\_11/No.3

A variety of network devices can be used to connect computers together.

(a) Complete the following sentences using the most appropriate network device from the list. Your answers must be different in each case.

an access point	a bridge	a hub
a modem	a network interface card	a switch
A device used to connect a	Local Area Network (LAN) to and	other LAN that uses the same
protocol is called		
A device used to convert a co	omputer's digital signal to an analo	ogue signal for communication
is called		
	nber of other devices and sends d	
	nputer that allows a device to conr	nect to a network is
***	apacam	[4]

rout	er.
(b)	Give the name of the part of the router where the IP addresses are stored.
	[1]
(c)	Explain how the data from a router is routed.
	*07
	[5]
	Palpa

A router is used to connect a LAN to the internet. A message is sent from the router to another

15.	Nov	/2020/Paper_12/No.5
	(a)	Compare and contrast an intranet with the internet.
		. 39
		69
		[8]

			internet	intranet	
	Ticl	$\operatorname{ck}\left(\mathscr{S}\right)$ whether the following statements refer to the $\operatorname{interr}$	n <b>et</b> or an <b>intran</b> e	et.	
16.	Mar,	r/2020/Paper_12/No.2			[6]
			<b>*O</b>		
		Use			
		Protocol 3		, , , , , , , , , , , , , , , , , , , ,	
		Use			
		Protocol 2			
		Use			
		Protocol 1			
		Identify <b>three</b> protocols and for each one, identify a use	э.		
	(b)	Protocols are associated with the internet and an intrar	net.		

(3)	internet (✓)	intranet (√)
This type of network is public		
This is the more secure type of network		
This type of network is global		
This type of network is more likely to be monitored		

<b>17.</b> June/2020/Paper_11/No
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Tick ( $\checkmark$ ) which of the following statements apply to LANs, which apply to WANs and which apply to WLANs.

	LAN (✓)	WAN (✓)	WLAN (✓)
The internet is an example of this type of network			
This type of network is found in a building but is connected without cables			
This type of network is used to transmit data between Europe and North America			
This type of network is found in a building but is connected with cables		.0	

ſ	4	1
		4

#### 18. June/2020/Paper\_12/No.3

Complete the following sentences using the most appropriate network term.

A network device that allows a LAN to connect to the internet is a ......

A wireless communication method used in WLAN is ......

[4]

19.	June/2020/Pa When using	aper_12/No.5 g the internet, FTP can be used.	
		at is meant by the term FTP.	
			[2]
20.	June/2020/Pa	aper_12/No.9b	
	(b) Many o	of the microprocessor-controlled devices in our homes use WiFi connections.	
	Descrik	pe the benefits and drawbacks of using WiFi connections in this way.	
		500	
		100 T	
			[6]

## **21.** June/2020/Paper\_13/No.3

A computer system is connected to a LAN and a WAN.

(a)	Explain what a LAN is.	
		[2]
(b)	Explain what a WAN is.	
		[2]
	Apa Call	
	Pale	

22.	June	/2020	/Paper_	13	/No.12
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A student is undertaking research for his studies. He needs to find up-to-date information and has decided to look for it using the internet.

Explain how he would check the reliability of this information.	
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<b>\0</b>	
70	
	[6]
Palo.	

23.	June/2020/Paper_13/No.13  A school is planning to set up a student work files area. The school is considering allowing students to log in to the student work files area either using the school's intranet or the internet.
	Discuss the advantages and disadvantages of using the school's intranet rather than the internet to access this student work files area.

[8]