

Monday 13 May 2024 – Morning

Level 3 Cambridge Technical in IT

05838/05839/05840/05841/05842/05877 Unit 1: Fundamentals of IT

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Please write clea	arly in black ink. Do not write in the barcodes.
Centre number	Candidate number
First name(s)	
Last name	
Date of birth	D D M M Y Y Y

INSTRUCTIONS

- · Use black ink.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer all the questions.

INFORMATION

- The total mark for this paper is 80.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has 20 pages.

ADVICE

Read each question carefully before you start your answer.

Section A

Put a tick (\checkmark) in the box next to the **one** correct answer for each question.

1	ΑP	ersonal Computer that contains a hard disk drive uses	storage.	
	A	Flash		
	В	Internal		
	С	Portable		
	D	Removable		F41
2	101	01110 is an example of which number system?		[1]
	A	Binary		
	В	Decimal		
	С	Denary		
	D	Hexadecimal		[1]
3	Wh	ich productivity software is the most appropriate to organise a use	er's contacts?	
	A	Email		
	В	Multimedia		
	С	Translator		
	D	Word Processor		[1]

4		ich business software allows users to work together using combinations of the combination	ations of text, images	
	A	CAD		
	В	Expert Systems		
	С	Multimedia		
	D	Project Management		[1]
5	Whi	ich of the following enables audio calls over the internet?		
	A	Cellular		
	В	Instant Messaging		
	С	SMS		
	D	VOIP		[1]
6	Whi	ich problem is usually caused by having too many applications rur	nning at the same time	
	A	Software freeze		
	В	Unexpected hardware behaviour		
	С	Unexpected power off		
	D	Unexpected rebooting		[1]

7	Whi	ch of the following is a TCP/IP protocol for sending and receiving e	mails?	
	A	FTP		
	В	НТТР		
	С	ICMP		
	D	SMTP		[41
				[1]
8	Whi	ch of the following allows more than one server to run on one piece	e of hardware?	
	Α	Client Virtualisation		
	В	Cloud Virtualisation		
	С	Server Virtualisation		
	D	Storage Virtualisation		[1]
9	192	.168.1.1 is the default IP Address for the main server on a network.	It is also the:	
	A	Default Gateway		
	В	MAC Address		
	С	PSTN		
	D	Subnet Mask		F.4.T
				[1]

10		ch method of communication allows short messages, images or videos to be shared w ny people?	ith
	A	IDE	
	В	Letters	
	С	Reports	
	D	Social networking	[1]
11	The	ability to plan and implement tasks is an example of which personal attribute?	
	A	Determination	
	В	Leadership	
	С	Respect	
	D	Time management	[1]
12	Kee	ping data safe from unauthorised access is an example of which operational issue?	
	A	Disaster planning and recovery	
	В	Health and safety	
	С	Organisational policies	
	D	Security of information	[1]
			L'I

13	Phis	shing is an example of:		
	A	blocking access to data		
	В	deleting data		
	С	listening to data transfers		
	D	obtaining confidential data		[1]
14	Whi	ch physical security technique protects data by making it permane	ntly unreadable?	
	Α	Biometrics		
	В	Locks		
	С	Privacy screens		
	D	Shredding		[1]
15	Whi	ch method of disposal replaces existing data with new data?		
	A	Electromagnetic wipe		
	В	Encryption		
	С	Overwrite data		
	D	Physical destruction		[1]
				נין

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Turn over for the next question

Section B

Blue Milk Cantina is a large chain of juice bars across the UK. They have recently updated the IT systems at the Head Office and the distribution warehouse. Head Office deals with staffing and wages, while the warehouse holds the stock for the juice bars. The warehouse uses robots to move the stock around.

The managers in the juice bars use tablet computers to place orders, keep track of staffing hours and to communicate with Head Office.

16	The juice bar managers place an order each week using the tablet computers.	
(a)	Identify two input devices that could be used to place the order.	
	1	
	2	
		[2]
(b)	Identify and describe one benefit and one limitation of using a tablet computer to place the orders.	
	Benefit	
	Limitation	
		 [4]

(c)	Each tablet connects to the internet and the company WAN using Wifi in the juice bars.					
	Identify and describe two types of communications hardware, other than ethernet cables, required to connect to the WAN.					
	1					
	2					
		 [4]				
(d)	Head Office are buying new tablet devices to capture promotional images for use online.					
	Identify a minimum storage capacity required for this device, including the unit of measurement.					
	Storage capacity					
	Unit of measurement	[2]				
		<u>.</u> -,				
17	Blue Milk Cantina use an app to manage staffing hours and wages.					
	What type of software is this an example of?					
		[1]				

18	Blue Milk Cantina use a Multiuser Operating System for the personal computers at Head Office.
	Describe one benefit and one limitation of using a Multiuser Operating System.
	Benefit
	Limitation
	[4]

19	Each week a video conference meeting is held between Head Office and all of the juice bar managers.
	Explain one advantage and one disadvantage of using video conferencing for this meeting.
	Advantage
	Disadvantage
	[6]
20	The Head Office IT system has one server that is used for multiple functions.
(a)	Identify and describe two advantages of separating the web and mail servers from the main file server.
	1
	2
	[4]

(b)* The Head Office IT system consists of 8 personal computers, one server and a three-in-one

scanner/printer/copier.
Identify a suitable network topology that could be used at the Head Office. Justify your choice including reference to the hardware required.
Network topology:
Justification
[10]

(c)	Updates to the firmware for the warehouse robots come with a Standard Operating Procedure (SOP).
	Identify and describe three advantages of using a SOP when updating the firmware.
	1
	0
	2
	3
	[6]
(d)	The warehouse has a range of hardware and software that is maintained by a team of ICT technicians.
	Identify and describe two barriers to communication for the ICT technicians working in the warehouse.
	1
	2
	[4]

21	The IT technicians must keep the warehouse IT systems running with minimal downtime.	
(a)	Identify and describe two personal attributes that the IT technicians should have.	
	1	
	2	
		[4]
(b)	The IT technicians are members of the Chartered Institute for IT.	
	Describe one benefit to the IT Technician for being a member of a professional organisation.	

 $(c)^*$ One of the juice bar managers has been caught stealing cash from the till. The staff in the

Discuss t	he issues	that shoul	d be incl	uded in tl	he whistle	eblowing p	oolicy.	
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(a)	manner, as one of its principles.
	[1]
22	Head Office need to keep the data on the main server secure.
	Identify one physical security measure that could be used to protect the server room.
	[1]

END OF QUESTION PAPER

EXTRA ANSWER SPACE

If you need extra space use this lined pages. You must write the question numbers clearly in the margin.



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