

Cambridge International Examinations

Cambridge International Advanced Level

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

8732173584

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/33

Paper 3

May/June 2014

1 hour 15 minutes

Candidates answer on the Question Paper.

No additional materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

Do not use staples, paper clips, glue or correction fluid.

You may use an HB pencil for any diagrams, graphs or rough working.

DO NOT WRITE IN ANY BARCODES.

Answer all questions.

The number of marks is given in brackets [] at the end of each question or part question.

The businesses described in this paper are entirely fictitious.



International Examinations



Scenario 1 Questions 1 to 4

Pan European Airlines (PEA) requires its passengers to book and manage their flight bookings via the Internet using its online booking system.

PEA has a website offering services to their customers. One of the services is the issuing of electronic tickets (e-tickets) when passengers book a flight.

E-tickets are produced by the booking system prior to the flights and are used at check-in to issue boarding passes.

The airline has a call centre open 24 hours, every day, to deal with customer queries.

PEA uses computer systems for training pilots. It has training facilities for its pilots using computer simulations which require specialised hardware.

PEA uses computer systems for financial purposes. Gordon is the manager of the financial department and uses computer modelling to manage its finances.

1	(a)	Describe three services other than the issuing of e-tickets that the PEA website could offer its passengers.
		1
		2
		3
		[3]
	(b)	Describe four steps that a customer would follow when booking flights using PEA's website.
		1
		2
		3
		4
		[4]
	(c)	Describe what is meant by an electronic ticket.
		[1]

(d) Describe four advantages to a customer of booking an airline ticket online.

1	
2	
3	
4	
	TA TO THE TOTAL TO

2

(a)	Describe two benefits to the airline of using a call centre to answer passenger of	enquiries.	
	1		
	2		
		[[2]
(b)	Discuss the advantages and disadvantages to a passenger of using a cassistance rather than going to a travel agent.	all centre f	or
			•••
			•••
			•••
			•••
			•••
			•••
			•••
			•••
			 [6]
		٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠	,
(c)	The airline call centre uses Computer Telephony Integration (CTI) software.		
	Describe two features of CTI software that would be useful to the airline.		
	1		
	2		
		[[2]

3	(a)	Describe the use of three specialised items of computer hardware that are required when using computer simulations to train pilots.
		1
		2
		3
		[6]
	(b)	Describe three advantages to the pilots of using computer simulations rather than real aircraft to learn to fly.
		1
		_
		2
		3
		[3]

Explain how Gordon could use a computer model to manage the company finances.	

Scenario 2 Questions 5 to 7

International Credit Enterprise is a bank with branches around the country. It holds customers' personal accounts and their savings accounts.

Customers can access their accounts either at a branch or by online banking via the bank's website.

The website can be used by disabled customers with suitably configured computers.

The bank also offers financial advice for customers and uses an expert system to help customers with their financial planning.

5 ((a)	Describe five difficulties that disabled people might encounter when trying to use online banking facilities.
		1
		2
		3
		4
		5
		[5]
((b)	Describe three software configurations of a personal computer that could be used to assist disabled people when accessing their bank accounts online.
		1
		2
		3
		101
		[3]

;	Explain how the bank's computer system would check that the person accessing the account details has the authority to do so.
	[6]

7	(a)	Describe in detail the use of five components of an expert system for financial planning.
		1
		2
		2
		3
		4
		T
		5
		[5]
	(b)	Describe two benefits to the bank of using an expert system.
		1
		2
		[2]
	(c)	Describe two drawbacks to the bank of using an expert system.
		1
		?
		2

Scenario 3 Questions 8 to 10

A school has a computer network that can be accessed by students from any computer in the school and remotely through the school website.

The students use the computers to improve their learning. The teachers use ICT to assist in the assessment of the students' work and to keep records of the students' progress.

The school uses a VPN to enable teachers to access the school network from home.

Describe five ways in which the school's computers could be used to improve the student learning.
1
2
3
4
5
Describe how a teacher could use ICT to record the progress of students and report the progress to parents.

10	(a)	Describe three network devices which could be used in the school's network. Include det of how each would handle data packets.	tails
		Device 1	
		Device 2	
		Device 3	
			[6]
	(b)	Explain what is meant by a VPN.	
			[3]

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