ICT applications - 2021/20 IGCSE 0417

Nov/2021/Paper_11/No.9

Rob	oots are used to spray paint cars in a car production company.
(a)	Describe two other jobs that robots can perform in car production.
	[2]
(b)	When the spray paint can is empty it needs to be refilled. There is a sensor in the can which measures the amount of paint.
	Describe the use of the sensor and microprocessor in this application.
	CP .
	[6]

(c)	Discuss the advantages and disadvantages of the introduction of robots rather than employing humans to spray paint the cars.
	[6]
	Palpa Car

	/2021/Paper_13/No.3 Identify two applications that use expert systems.
	1
	2
	[2]
(b)	Identify three components found in an expert system.
	1
	2
	3
	[3]
	(a)

	Discuss the advantages and disadvantages of internet banking for the customer.
	[6
	/2021/Paper_13/No.9a,b ckit Motors has opened a car store in a shopping mall.
C.,,	stomers can test drive the cars they are planning to purchase using virtual reality system
	nin the store.
with	Name two devices which would be used in this virtual reality system.
with	
with	Name two devices which would be used in this virtual reality system.
with	Name two devices which would be used in this virtual reality system.

3. Nov/2021/Paper_13/No.7b

	(D)	Explain the term virtual reality.
		[3]
5.	Mar	/2021/Paper_12/No.4b
	(b)	Describe the computer processing involved in the use of a microprocessor-controlled fitness tracker when displaying and monitoring the blood pressure of the user.
		10
		(3)
		200
		[4]
		[4]

6.	luna	/2021	/Paper_	11	/No. 4
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Many banks have reduced the number of staff in their branches and replaced them with automatic teller machines (ATMs). These ATMs, which can be located within the bank, can be used by customers to deposit and withdraw money from their bank accounts.

(a) ATMs can be used to deposit cheques.

Describe the computer processing involved in depositing a cheque at an ATM.

Discuss the advantages and disadvantages to a customer of visiting the bank rather than using internet banking.
201
[6]
Palpa

(b) Customers can visit these banks or use internet banking.

7	,	luna	/2021	/Paper_	11	/No 13
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RockIT Airlines representatives use a computer booking system to book flights for customers.

A representative from the airline types in the customer reference number, the number of passengers, departure time, departure date, departure airport and the destination airport.

A customer is planning to take a flight from London Heathrow Airport. The representative types in a code LHR for London Heathrow Airport. One of the reasons for using a code for the airport is to improve data accuracy.

imp	rove data accuracy.	
(a)	Describe two other advantages of using a code rather than typing out the full name.	
	1	
	2	
		[2]
(b)	Describe the importance of data accuracy when making a booking.	
	V0.0x	[2]
		[4]

(c)	Describe the processing and outputs involved in making the booking.	
	199	
		[6]
	oaca.	
	Na San	

8	June	/2021	/Paper_	11	/No.14
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9.

A road through a village has a speed limit of 45 kilometres per hour. The police are checking and recording the speed of vehicles passing through the village using measuring hardware and software, so they can produce a report of their findings.

(a)	Explain the difference between measurement and control when using microprocessors.	
		[2]
(b)	Describe the role of the microprocessor in this scenario.	
	CP .	
	-70	
		[4]

Tick (✓) whether the following are examples of **control**, **measurement** or **modelling** applications.

	control (√)	measurement (√)	modelling (√)
Personal finance			
Weather forecasting			
Burglar alarms			
Weather stations		100	1

