

Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

2359/02

**INFORMATION AND
COMMUNICATION TECHNOLOGY**

Paper 3 (Higher Tier)

MONDAY 28 JUNE 2010: Afternoon

DURATION: 1 hour

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the Question Paper

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- **Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes on the first page.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully and make sure that you know what you have to do before starting your answer.**
- **Answer ALL the questions.**
- **Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your Candidate Number, Centre Number and question number(s).**

INFORMATION FOR CANDIDATES

- **The number of marks is given in brackets [] at the end of each question or part question.**
- **The total number of marks for this paper is 60.**
- **No marks will be awarded for using brand names of software or hardware.**

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- 1 Tick ONE box in each row to show whether the activity stated is performed using utility software or application software.

ACTIVITY	UTILITY (✓)	APPLICATION (✓)
Creating a database		
Exploring options within a model		
Making a back up disk		
Moving a file from one disk directory to another		
Producing a word-processed document		

[5]

2 Describe each of the following data collection methods giving a use for each.

OMR _____

USE _____

MICR _____

USE _____

[4]

3 Most supermarkets are now computerised.

(a) When a product is purchased the checkout operator needs to input details from the product.

(i) Identify ONE input device, other than a keyboard, which would be suitable for entering these details.

_____ [1]

(ii) Give TWO reasons why this method is more suitable than using a keyboard.

Reason 1 _____

Reason 2 _____

_____ [2]

(b) Customers can use credit or debit cards to pay for the goods.

(i) Identify ONE input device, other than a keyboard, which would be suitable for entering details from these cards.

_____ [1]

(ii) Give TWO items of data which will be read by this device.

Item 1 _____

Item 2 _____

_____ [2]

Many supermarkets are changing to internet shopping.

(c) Give THREE advantages to the CUSTOMER of using internet shopping rather than shopping at a supermarket.

Advantage 1 _____

Advantage 2 _____

Advantage 3 _____

_____ [3]

(d) Give FOUR effects that the change from supermarket shopping to internet shopping is having on the pattern of employment within the supermarket.

Effect 1 _____

Effect 2 _____

Effect 3 _____

Effect 4 _____

_____ [4]

4 Two types of network are a WAN and a LAN.
Give TWO characteristics of each.

WAN

1 _____

2 _____

LAN

1 _____

2 _____

_____ [4]

**5 The ring network topology is less frequently used than in the past.
Explain why this has happened.**

[3]

6 Describe how a microprocessor would control the temperature inside a greenhouse, including inputs, processing and outputs.

[6]

7 A travel agent wants to set up a database system for customer records. Describe the issues that should be considered when designing onscreen data entry forms.

[4]

8 A number of organisations are using video conferencing rather than holding face to face meetings. Discuss the benefits and drawbacks of holding meetings by video conference.

[6]

9 Explain why doctors use expert systems to help them with their diagnoses.

[3]

10 A small company is computerising its operations. Before the new system is designed, the existing system must be analysed. Explain the advantages of the different methods the systems analyst could use to collect information about the current system.

[6]

11 Banks are concerned about the possibility of hacking during internet banking sessions.
Discuss the advantages and disadvantages of different methods used to safeguard data.

[6]

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