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APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/31

Paper 3

May/June 2015

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.

This document consists of **15** printed pages and **1** blank page.

Scenario 1

Questions 1, 2 and 3

Computer Assist is a company that provides computing facilities for disabled people.

The computers allow disabled people to access the internet to view websites and to use commercial and government online services.

The company provides additional, specialised hardware for its computers and specialised software is installed for use by disabled people.

- 1 (a) Describe how disabled people could use specialist software to convert between text and speech.

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- (b) Name and describe two other methods that can assist disabled people to enter data into a computer.

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2 Explain how access by disabled people to each of the following services has been increased by use of the internet.

(a) Health services

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(b) Employment opportunities

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3 Describe **three** features of some websites that could make it difficult for viewing by visually impaired people.

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Scenario 2**Questions 4, 5, 6, 7 and 8**

Desirable Outfits sells goods from a number of shops.

The shops are connected to a computerised stock control system using Point of Sale (POS) terminals.

Desirable Outfits supplies its shops from a central warehouse and uses a computerised 'just-in-time' stock control system.

Desirable Outfits wants to increase its sales by advertising in the media using newspapers, radio and television.

Desirable Outfits uses mailmerge to contact selected customers about a new clothing range.

Mahmoud has been invited for interview at head office and will need to travel by train.

4 (a) Describe the steps that Mahmoud would take in order to buy a train ticket online.

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(b) Discuss the benefits and drawbacks of buying train tickets online.

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5 (a) Describe what is meant by a 'just-in-time' stock control system.

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(b) Describe the benefits and drawbacks to Desirable Outfits of using a computerised 'just-in-time' stock control system.

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- 6 Describe how variable fields are set up in the mailmerge to control the selection of customers who will receive the information about the new clothing range.

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7 (a) Describe how hardware and software are used in a computerised automatic stock control system linked to POS terminals.

(i) Hardware
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(ii) Software
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(b) Describe the processing carried out by a computerised stock control system.

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8 Describe **three** ways that Desirable Outfits could carry out market research to find out the effectiveness of its advertising in the media.

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Scenario 3**Questions 9, 10, 11 and 12**

Colin is a network administrator responsible for a company network that allows employees to access its facilities from within the company buildings and from outside. The company uses dedicated cabling within its buildings.

The network is used by employees who work in the company buildings and there is an extranet for use by employees who work from home and when travelling on business.

Various protocols are used to transfer data over a network.

Colin uses Telnet and Secure Shell (SSH) for maintaining and administering the computers and servers on the network. Telnet and SSH are network protocols used in some client server systems.

9 (a) Describe what is meant by an extranet.

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(b) Discuss the benefits and drawbacks of having an extranet.

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(c) Explain why the company uses dedicated cabling for its network.

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10 Describe what is meant by a client server system.

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11 Explain why Colin prefers to use SSH rather than Telnet for administering the network.

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