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APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/12

Paper 1

February/March 2016

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 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 **16** printed pages and **4** blank pages.

Scenario 1**Questions 1 and 2**

A large supermarket, located in Delhi, uses a computer system for a number of purposes.

The manager of the supermarket, Surinder, has introduced a service allowing customers to order their groceries online for later delivery.

Surinder decides to employ Rafat, a systems analyst, to investigate how the online system could be improved.

The supermarket has recently introduced a customer loyalty card. Customers who have a card, have it scanned when they pay for goods. Details of the purchases are stored on the supermarket's computer system and discounts which the customer is entitled to are deducted from the bill.

- 1 (a) The supermarket uses laser, inkjet and dot matrix printers. Describe a benefit and give an **appropriate** use for each printer in the supermarket. Each benefit must be different.

Laser

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Inkjet

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Dot Matrix

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..... [6]

- (b) Rafat needs to research the present system. Describe each of the following methods and indicate how they would be used by Rafat.

- (i) Examination of documents

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..... [2]

- (ii) Questionnaires

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..... [2]

- (iii) Interviews

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..... [2]

- 2 (a) Only a small number of customers have applied for a loyalty card. Give **three** reasons why customers may not want to use such a card. For each reason, explain **one** measure that Surinder can take to overcome the reluctance of the customers.

Reason 1

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Measure 1

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Reason 2

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Measure 2

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Reason 3

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Measure 3

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..... [6]

Scenario 2**Question 3**

Johannus is writing a report for the management of the publishing company which he works for. The information he produces needs to be wide-ranging and presented in such a way that it is easily understood.

When Johannus has finished his report he decides to send it to his department manager for her comments before submitting it to the management of the company.

3 (a) (i) Johannus sends the report electronically.
Give **two** reasons why Johannus compresses the file before it is sent.

- 1.
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- 2.
..... [2]

(ii) Explain how his manager can use word processing software features to make any necessary amendments clear to Johannus when the report is returned to him.

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..... [3]

(b) The management are very impressed with the report that Johannus has produced. They decide that a copy should be given to each employee of the company. The report is produced on a monochrome (black and white) printer.
Explain how the clarity of the graphs and charts in the report can be maintained.

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..... [3]

(c) The publishing company use computerised plate making to produce the printing plates necessary to print magazines.

(i) Describe how computerised plate making is used to print a page in a magazine.

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..... [3]

(ii) Describe **four** benefits of using computerised plate making.

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Scenario 3**Questions 4 and 5**

NWtyre is a business which deals with replacing car tyres on vehicles.

There are many hundreds of different tyres which vary in a number of ways, including price.

Each tyre has an ID code consisting of two letters followed by three digits. The letters are the first two letters of the make of car for which the tyre was designed and the three digits are added to make the ID code unique for that tyre type.

NWtyre are considering using robots to change the tyres on vehicles.

4 (a) Details of the tyres are kept in a flat file with the following structure:

Field Name	Data Type	Description
Tyre_ID		Five character ID code for tyre
Price		Price per tyre in Rupees
No_In_Stock		Number of that type available immediately
Mix		Whether or not it can be safely mixed with other tyres
Manufacturer		Name of company that makes the tyre

Fill in the data types for each field name. [3]

(b) When the data of a new tyre is entered into the file it must be checked for accuracy.

(i) Explain what is meant by verification of data and describe how data input to the Tyre_ID and Price fields should be verified.

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(ii) Explain what is meant by validation of data and describe how data input to the Tyre_ID and Price fields should be validated.

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..... [3]

Scenario 4

Question 6

Soydelight is a restaurant which has a small range of dishes made from soya beans.

Customers order their food at the counter where an assistant uses a touchscreen to input each order.

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