Pearson Edexcel International GCSE

Information and Communication Technology
Paper 2: Practical Paper

12–16 May 2014 **Time: 3 hours**	Paper Reference **4IT0/02**

You must have:
Short treasury tag, cover sheet, data files: CYCLES, CYCLETOUR, INFORMATION, JUNE, PMMM, TOUR, IMAGES folder

Instructions

- Complete your candidate details on the cover sheet provided.
- At the end of the examination use a treasury tag to attach your printouts to page 2 of the cover sheet.

Information

- There are **five** activities in this examination paper totalling **100** marks.
- The marks for the parts of tasks are shown in round brackets: e.g. **(2)**.

Advice

- Read through the instructions on page 3.
- Attempt **ALL** activities.
- Take breaks away from the computer from time to time.
- Label your printouts clearly as instructed in each task.

Turn over ▶

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Instructions to Candidates

This paper consists of **five** activities.

Work through the activities and tasks in order.

Do not spend too much time on any one activity. A suggested time is given at the start of each activity.

For all tasks, you **MUST** enter the task number, your name, candidate number and centre number **BEFORE PRINTING**.

This table shows the marks and data files needed for each activity.

Activity	Marks	Data files needed
1 Using Spreadsheet Software (SS)	29	CYCLES
2 Using Web Authoring Software (WA)	17	INFORMATION, IMAGES folder
3 Using Database Software (DB)	29	PMMM
4 Using Presentation Software (PS)	16	IMAGES folder, CYCLETOUR, TOUR
5 Using DTP/Word Processing Software (WP)	9	JUNE, IMAGES folder
Total Marks	**100**	

For all activities, you may also need to use word processing software.

Scenario

Philip Moss and Mary McKenzie own *PMMM Cycles Ltd*.

The company rents out cycles and sells cycling equipment.

Philip manages the rental section.

These are the contact details for the company.

Address:
PMMM Cycles Ltd
13 Mansion Street
Crixtren
Yorkshire
BF5 1PL

Telephone: 01632 960123
Website: www.pmmmcycles.com
Email: philip@pmmmcycles.com or mary@pmmmcycles.com

Activity 1 – Using Spreadsheet Software (SS) (suggested time 50 minutes)

Philip has set up a spreadsheet to calculate income from bicycle rentals.

He has called the spreadsheet **CYCLES**.

The spreadsheet has two worksheets: **INCOME** and **GROUP**.

Task SS1

Open the **CYCLES** spreadsheet.

Open the **INCOME** worksheet.

Enter **Task SS1**, your name, candidate number and centre number in the footer of the worksheet.

The **INCOME** worksheet shows the number of bicycles rented each week in April.

Sort the data so that the bicycle types are in ascending order.

SAVE the spreadsheet as **TASK SS1**.

PRINT the **INCOME** worksheet on **one** side of A4, showing the **data**.

(Total for Task SS1 = 2 marks)

Task SS2

Philip wants to know the income for each bicycle type and the total income.

(i)   Enter a formula to calculate the total number of rentals of the first **Bicycle Type**.

(2)

(ii) Enter a formula to calculate the income from the first **Bicycle Type**.

(1)

(iii) Replicate the formulae for the other bicycle types.

(1)

(iv) Enter appropriate headings for the new columns.

(1)

(v) Enter a formula to calculate the **Total Income** for the month.

(2)

Edit the footer to show that this is **Task SS2**.

SAVE the spreadsheet as **TASK SS2**.

PRINT the **INCOME** worksheet on **one** side of A4, showing the **formulae**.

Make sure the row and column headings are shown.

Make sure the columns are wide enough to show the complete **formulae**.

Reduce the width of other columns, if necessary, to ensure that your formulae can be read.

(Total for Task SS2 = 7 marks)

Task SS3

Philip wants a chart to show the number of rentals of each bicycle type for each week in April.

The chart must:

- be fit for purpose
- have a suitable title and axis labels.

CREATE the chart as a separate worksheet.

Enter **Task SS3**, your name, candidate number and centre number in the footer of the chart.

SAVE the spreadsheet as **TASK SS3**.

PRINT the **chart** to fill **one** A4 sheet.

(Total for Task SS3 = 5 marks)

Task SS4

The company rents bicycles to community groups.

Philip has created a worksheet to be used as an invoice to send to group organisers.

Open the **GROUP** worksheet.

Enter **Task SS4**, your name, candidate number and centre number in the footer of the worksheet.

(a) Formulae need to be entered for the calculations on the invoice.

   (i) Enter a formula to calculate the **Cost** for the Dirtbuster bicycle type.
      (Rental Charge x Number Required)

(1)

   (ii) Replicate this formula for the other bicycle types.

(1)

   (iii) Enter a formula to calculate the **Total Cost**.

(1)

   A discount is given if the **Total Cost** is £300 or more.

   The discount percentage is stored in cell F27.

   (iv) Enter a formula, using a function, to calculate the value of the **Discount**.

(3)

   (v) Enter a formula to calculate the **Invoice Total**.

(1)

SAVE the spreadsheet as **TASK SS4**.

PRINT the **INVOICE** worksheet on **one** side of A4, showing the **formulae**.

Make sure the row and column headings are shown.

Make sure the columns are wide enough to show the complete **formulae**.

Reduce the width of other columns, if necessary, to ensure that your formulae can be read.

(b) The worksheet needs to be formatted so that it is fit for purpose as an invoice.

Format the worksheet so that:

(i) currency values are formatted to show the currency symbol and 2 decimal places

(1)

(ii) it is well presented and fit for purpose as an invoice.

(2)

RESAVE the spreadsheet.

DO NOT PRINT at this stage.

(c) Philip wants to check that the invoice is fit for purpose.

(i) Enter this test data into the worksheet.

Organiser:	Mrs Francesca Gorst
Group Name:	Crixtren Cyclers
Address:	3 Meadow Lane, Crixtren, Yorkshire, BF5 1MM
Number of bicycles required	
Dirtbuster	7
Family Tandem	4
Mountain Chaser	6
Speedster	4
Stardriver	5
Two Wheel Angel	4

(2)

RESAVE the spreadsheet.

(ii) On **one** side of A4, portrait, print columns A to D **only**, showing the **data**.

(1)

(d) Display the **GROUP** worksheet on the screen in data view.

Take a screen shot of the worksheet.

Open a new document using word processing software.

Enter **Task SS4d**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK SS4d**.

Paste the screen shot of the **GROUP** worksheet into **TASK SS4d**.

Explain how you have used formatting to make the invoice well presented and fit for purpose.

(2)

RESAVE TASK SS4d.

PRINT TASK SS4d.

(Total for Task SS4 = 15 marks)

TOTAL FOR ACTIVITY 1 = 29 MARKS

Activity 2 – Using Web Authoring Software (WA) (suggested time 25 minutes)

You may use any appropriate software for this activity.

Task WA1

Philip has purchased a new bicycle for rental. It is a Mountain Chaser bicycle that he has named 'Silver Sprite'.

He wants to add a page to the company website about the bicycle.

(a) Philip wants to include the image **SILVERSPRITE** from the **IMAGES folder**.

He wants the image cropped before it is used.

Crop the image so that:

• the image remains rectangular

• the cropping is as close as possible to the cyclist and the bicycle.
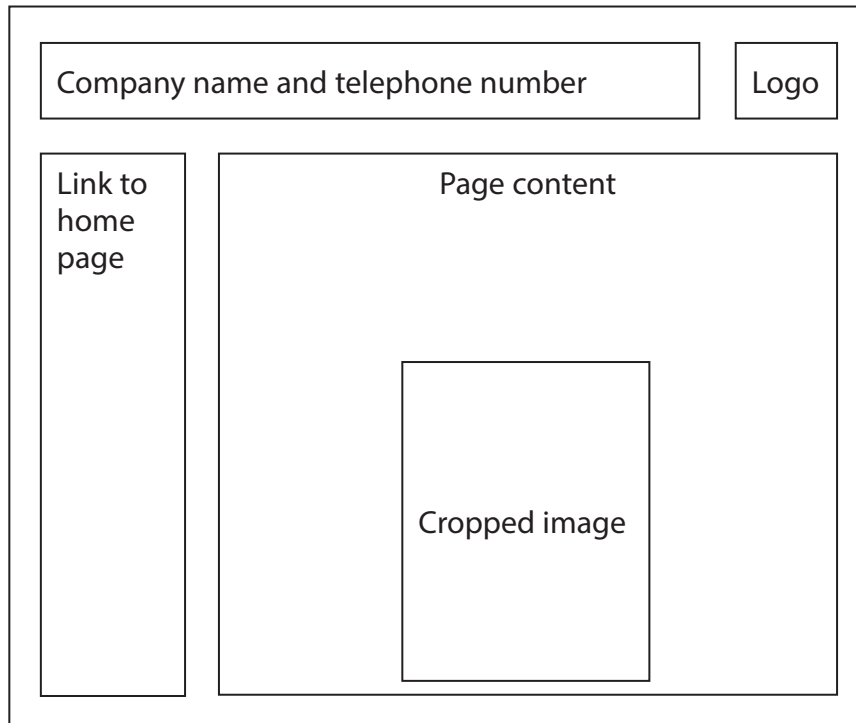
(3)

SAVE the cropped image.

DO NOT PRINT at this stage.

(b) Create the web page.

The web page is based on this design.

Company name and telephone number	Logo

Link to home page	Page content
	Cropped image

Website house style:

Background colour – pale blue

Text colour – dark blue

Information about 'Silver Sprite' is stored in the file **INFORMATION**.

The company logo is stored in the **IMAGES folder**.

(i) Create the web page using the layout shown in the design.

(5)

(ii) Make sure the web page is fit for purpose.

Display the full web page on the screen.

Make sure all the content is visible.

Take a screen shot of the web page.

(5)

SAVE the web page as **NEWBICYCLE**.

Open a new document using word processing software.

Enter **Task WA1**, your name, candidate number and centre number in the footer of the document.

Paste the screen shot into **TASK WA1**.

SAVE the document as **TASK WA1**.

DO NOT PRINT the document **TASK WA1** at this stage.

(c) Answer these questions on the document **TASK WA1**.

(i) Explain how **two** formatting features you have used make the web page fit for purpose.

(2)

(ii) Describe **one** change to the web page that would make it more accessible for visually impaired users.

(2)

RESAVE TASK WA1.

PRINT TASK WA1.

(Total for Task WA1 = 17 marks)

TOTAL FOR ACTIVITY 2 = 17 MARKS

Activity 3 – Using Database Software (DB) (suggested time 50 minutes)

The **PMMM** database has three tables:

- CONTACT

- BICYCLE

- RENTAL

Philip has stored details of customers in the **CONTACT** table.

Task DB1

The structure of the **CONTACT** table is:

Field Name	Data Type	Description
ID	Text	Unique code for each contact
TITLE	Text	Contact title Mr or Ms or Dr
FIRSTN	Text	First name of contact
LASTN	Text	Last name of contact
ADDR1	Text	First line of address of contact
ADDR2	Text	Second line of address of contact
POSTC	Text	Postcode of address of contact
MOBNO	Text	Mobile phone number of contact
GENDER	Text	M for male, F for female

Philip wants a data entry form for the **CONTACT** table.

    (a) Create the data entry form.

        It must:

- have a suitable title

- be clear and easy to use

- include a drop down list for at least one field.

SAVE the data entry form as **DB1a**.

      (i) Display the form in **form** (data entry) view.

          Take a screen shot of the complete data entry form.

          (6)

Open a new document using word processing software.

Enter **Task DB1a**, your name, candidate number and centre number in the footer of the document.

Paste the screen shot into the document.

SAVE the document as **TASK DB1a**.

DO NOT PRINT at this stage.

Answer these questions on document **TASK DB1a**.

(ii) Explain why the **Data Type** for **MOBNO** is set as 'Text'.

(1)

(iii) Explain why a drop down list is sometimes used on a data entry form.

(1)

RESAVE TASK DB1a.

PRINT TASK DB1a.

Philip wants the table sorted.

Open a new document using word processing software.

Enter **Task DB1b**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK DB1b**.

(b) Sort the **CONTACT** table in ascending order of **LASTN**.

(2)

Copy and paste the **CONTACT** table into **TASK DB1b**.

RESAVE TASK DB1b.

PRINT TASK DB1b.

(Total for Task DB1 = 10 marks)

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Task DB2

Open a new document using word processing software.

Enter **Task DB2**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK DB2**.

   (a) Philip wants a list of female contacts.

       The list should show only the **TITLE**, **FIRSTN**, **LASTN**, **ADDR1**, **POSTC** and **MOBNO** fields in this order.

       Create a query/search on the **CONTACT** table to produce this list.

SAVE the query/search as **DB2a**.

       Display the results of your query/search.

                                                            (3)

Copy the results of your search into **TASK DB2**.

RESAVE TASK DB2.

DO NOT PRINT at this stage.

   (b) Philip has stored details of the bicycles in the **BICYCLE** table.

       He wants a list of 'Family Tandem' type bicycles **purchased** before 1 January 2013.

       The list should show only the **BICYCLENAME**, **BICYCLETYPE**, **PURCHASEDATE** and **COST** fields.

       Create a query/search on the **BICYCLE** table to produce this list.

SAVE the query/search as **DB2b**.

       Display the results of your query/search.

                                                            (3)

Copy the results of your query/search into **TASK DB2**.

RESAVE TASK DB2.

PRINT TASK DB2.

                            (Total for Task DB2 = 6 marks)

Task DB3

Open a new document using word processing software.

Enter **Task DB3**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK DB3**.

The **PMMM** database contains the **BICYCLE**, **CONTACT** and **RENTAL** tables.

These tables need to be linked.

    (a) Create relationships (links) between the tables.

        Display the relationships on the screen.

        Make sure all relationships are displayed.

        Make sure that all fields are displayed.

        Take a screen shot of the relationships.

                                                              (3)

Copy and paste the screen shot into **TASK DB3**.

RESAVE TASK DB3.

DO NOT PRINT at this stage.

    (b) Philip wants a list of contacts who rented a bicycle on a Monday in May (the dates are 5, 12, 19 and 26 May).

        The list should show only the **RENTAL_DATE**, **FIRSTN**, **LASTN**, **MOBNO**, **BICYCLENAME** and **RENTALCHARGE** fields.

        Create a query/search to produce this list.

SAVE the query/search as **DB3b**.

        Display the query/search in **design** view.

        Make sure you can see:

          •   the tables used in the query/search

          •   the fields that will be shown in the results

          •   the criteria used for the query/search.

        Take a screen shot of the design.

                                                                  (5)

Paste the screen shot into **TASK DB3**.

RESAVE TASK DB3.

PRINT TASK DB3.

(Total for Task DB3 = 8 marks)

Task DB4

Philip wants a database report based on the results of the query/search carried out in **Task DB3 (b)**.

Create a database report to display these results.

In the database report you must:

• have a suitable title

• show only the **RENTAL_DATE**, **LASTN**, **MOBNO**, **BICYCLENAME** and **RENTALCHARGE** fields in this order

• make sure the column headings are easy to understand

• enter **Task DB4** and your name, candidate number and centre number in the page footer.

Check that the layout and content of the database report is fit for purpose.

Make sure the database report fits onto one side of A4.

SAVE the database report as **TASK DB4**.

PRINT the database report.

(Total for Task DB4 = 5 marks)

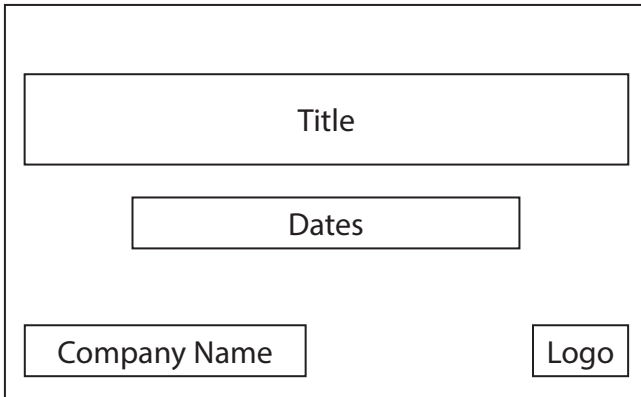TOTAL FOR ACTIVITY 3 = 29 MARKS

Activity 4 – Using Presentation Software (PS) (suggested time 25 minutes)

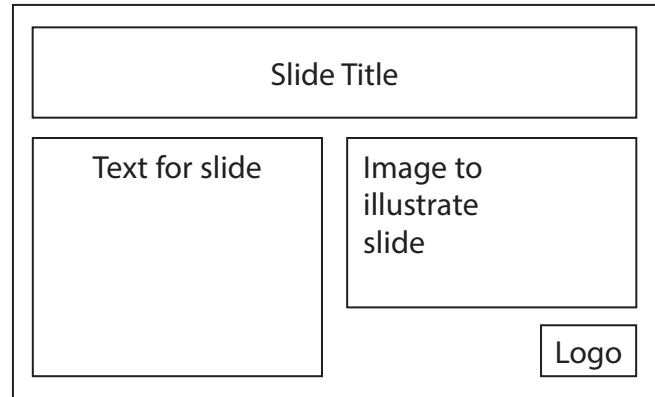Philip is organising a bicycle tour around Yorkshire.

He has been asked to give a presentation to a local youth club.

These are his original designs for the slides.

Title Slide (slide 1)   **Other Slides**

Title
Dates
Company Name	Logo

Slide Title
Text for slide	Image to illustrate slide
	Logo

He has started to produce the title slide.

These files are available:

- the title slide in **CYCLETOUR**

- text about the bicycle tour in **TOUR**

- images in the **IMAGES folder**.

Task PS1

Open the slide presentation **CYCLETOUR**.

Enter **Task PS1**, your name, candidate number and centre number in the footer of the **NOTES/HANDOUTS** view of the presentation.

SAVE the presentation as **TASK PS1**.

Open a new document using word processing software.

Enter **Task PS1a**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK PS1a**.

(a) Display the Master slide and make these changes.

    (i) Add the image, **LOGO**, from the **IMAGES folder**, to the bottom right-hand corner.

(1)

    (ii) Change the default font to a more appropriate font.

(1)

(iii) Enter your name and candidate number in the centre section of the footer.

Delete the date place holder from the footer.

(2)

(iv) Make sure that the whole Master slide is visible.

Paste a screen shot of the Master slide into the word processed document **TASK PS1a**. Make sure the changes you have made can be seen clearly.

(1)

RESAVE TASK PS1.

RESAVE TASK PS1a.

PRINT TASK PS1a on **one** side of A4.

(b) Philip wants you to complete the presentation using:

- the layout shown in his original design

- selected information from the file **TOUR** (you may need to edit the text for use in the presentation)

- suitable images from the **IMAGES folder**.

(i) Create:

- slide 2 that identifies the places to be visited

- slide 3 that details the requirements

- slide 4 that gives details about the cost and how to find out more about the tour.

Make sure that the slides are suitable for presentation to a local youth club.

(6)

RESAVE TASK PS1.

(ii) **PRINT** a **handouts** copy of the presentation with **two** slides on each A4 sheet.

(1)

Open a new document using word processing software.

Enter **Task PS1c**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK PS1c**.

Display slide 2. Make sure that the whole slide is visible.

Paste a screen shot of the slide into **TASK PS1c**.

(c) Answer these questions on document **TASK PS1c**.

    (i)   Identify **one** feature you have used and explain how it makes **this slide** suitable for presentation to a youth club.

                    (2)

    (ii) Describe **one** enhancement you could make to the **presentation** to make it more appealing for the target audience.

                    (2)

RESAVE the document as **TASK PS1c**.

PRINT TASK PS1c.

(Total for Task PS1 = 16 marks)

TOTAL FOR ACTIVITY 4 = 16 MARKS

Activity 5 – Using DTP/Word Processing Software (WP) (suggested time 20 minutes)

Philip has started to produce his report for the June meeting of the Management Board of *PMMM Cycles Ltd*.

He has saved the text as **JUNE**.

Task WP1

Open a new document using word processing software.

Enter **Task WP1**, your name, candidate number and centre number in the footer of the document.

SAVE the document as **TASK WP1**.

(i)   Produce the report, bringing together text and images.

The report must include:

- the text in **JUNE**
- the logo from the **IMAGES folder**
- the chart that you created in **Task SS3**.
- a screen shot of the web page you created in **Task WA1**
- the results of the query/search you designed in **Task DB2 (b)**
- a copy of slide 2 from the presentation created in **Task PS1 (b)**.

(6)

(ii) Format the report so that it:

- fits on **one** side of A4
- is well organised and fit for purpose.

(3)

RESAVE TASK WP1.

PRINT TASK WP1.

(Total for Task WP1 = 9 marks)

TOTAL FOR ACTIVITY 5 = 9 MARKS
TOTAL FOR PAPER = 100 MARKS

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