Information and Communication Technology
Paper 2: Practical Paper

| 15 – 19 May 2017 **Time: 3 hours** | Paper Reference **4IT0/02** |

You must have:
Short treasury tag, cover sheet
Data files: COASTWALK, OPR2017, PEMBROKE, WALK, 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.

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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 each 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)	28	COASTWALK
2 Using Database Software (DB)	28	OPR2017
3 Using Art/Imaging and Graphics Software (AG)	12	IMAGES folder
4 Using Web Authoring Software (WA)	17	PEMBROKE, IMAGES folder
5 Using DTP / Word Processing Software (WP)	15	PEMBROKE, WALK, IMAGES folder
Total Marks	**100**	

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

Scenario

Leonie Desailly is the leader of Outgrove Park Ramblers.

She is organising a walking holiday in South Wales for a group of members.

The group will walk along the Pembrokeshire Coast Path.

These are Leonie's contact details.

Address:

>   2 Wallcroft Close
>   Outgrove Park
>   Glasgow
>   G38 3EP

Telephone: 0141 496 0123

Website: outgroverambler.org

Email: leonie.desailly@outgroverambler.org

Activity 1 – Using Spreadsheet Software (SS) (suggested time 45 minutes)

Leonie has collected payments for the walking holiday.

The **COASTWALK** spreadsheet contains two worksheets called **PAYMENTS** and **WALKS**.

Task SS1

Open the **COASTWALK** spreadsheet.

Open the **PAYMENTS** worksheet.

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

(a) Enter a formula:

   (i)   in cell **I6** to calculate the total payment made by the first walker

   (2)

   (ii) in cell **J6** to calculate the average monthly payment made by the first walker.

   (2)

SAVE the spreadsheet as **TASK SS1**.

DO NOT PRINT at this stage.

(b) The cost of the holiday will be stored in cell **B3**.

   (i)   Enter:

   •   the label **Cost** in cell **A3**

   •   the value **650** in cell **B3**.

   (1)

   (ii) Enter a formula in cell **K6** to calculate the balance to pay for the first walker.

   (2)

RESAVE TASK SS1.

DO NOT PRINT at this stage.

(c) Leonie wants to send a reminder to walkers where the balance to pay is greater than their average monthly payment.

   Enter a formula in cell **L6** that displays "Yes" if the balance to pay for the first walker is greater than their average monthly payment or "No" if it is not greater.

   (3)

RESAVE TASK SS1.

DO NOT PRINT at this stage.

(d) Replicate the formulae in cells **I6:L6** for the other walkers.

(2)

RESAVE TASK SS1.

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

Make sure the row and column headings are shown.

Make sure columns **I**, **J**, **K** and **L** are wide enough to show the complete formulae.

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

(Total for Task SS1 = 12 marks)

Task SS2

(a) Sort the **PAYMENTS** worksheet in alphabetical order of **FirstName** within alphabetical order of **LastName**.

(3)

(b) Format the worksheet so that:

   (i)   columns **I**, **J**, **K** and **L** have suitable labels

(1)

   (ii) currency values show the currency symbol with no decimal places

(1)

   (iii) all data is visible

(1)

   (iv) the presentation is improved.

(2)

Enter **Task SS2**, your name, candidate number and centre number in the footer.

SAVE the spreadsheet as **TASK SS2**.

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

Open a new document using word processing software.

Enter **Task SS2c**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK SS2c**.

(c) Display the data view of the **PAYMENTS** worksheet on the screen.

Paste a screen shot of the worksheet into document **TASK SS2c**.

(i) Identify **one** formatting feature you have used to improve the presentation of the worksheet.

(1)

(ii) Describe how this formatting feature improves the presentation.

(1)

RESAVE the spreadsheet.

RESAVE TASK SS2c.

PRINT TASK SS2c.

(Total for Task SS2 = 10 marks)

Task SS3

Open the **WALKS** worksheet.

Leonie wants a chart to show the distances of the walks.

Create a suitable chart.

It must:

• have a suitable title and axis labels

• be fit for purpose

• be on 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** side of A4.

(Total for Task SS3 = 6 marks)

TOTAL FOR ACTIVITY 1 = 28 MARKS

Activity 2 – Using Database Software (DB) (suggested time 45 minutes)

The **OPR2017** database has three tables: **WALKER**, **COASTALWALK** and **HISTORY**.

Task DB1

Open the **OPR2017** database.

Open the **WALKER** table.

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

Field Name	Data Type	Description
WALKER_ID	Text	Unique code for each walker
TITLE	Text	Title of walker (Mr or Ms or Dr)
FIRSTNAME	Text	First name of walker
LASTNAME	Text	Last name of walker
ADDR1	Text	First line of address of walker
ADDR2	Text	Second line of address of walker
POSTCODE	Text	Postcode of address of walker
MOBILE	Text	Mobile telephone number of walker
GENDER	Text	M for male, F for female
BIRTHDATE	Date/Time	Date of birth (short date format)

Open a new document using word processing software.

Set the orientation to landscape.

Enter **Task DB1**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK DB1**.

(a) Leonie wants to add a new record to the **WALKER** table.

Add these details to the **WALKER** table.

Walker ID	134
Title	Dr
First name	Agnetha
Last name	Anderssen
First line of address	5 Hill St
Second line of address	Denhome
Postcode	G27 9EM
Mobile	07700 900135
Gender	Female
Date of birth	9 August 1988

(2)

(b) Sort the **WALKER** table in alphabetical order of **FIRSTNAME** within alphabetical order of **LASTNAME**.

(2)

SAVE the **WALKER** table.

Copy and paste the sorted **WALKER** table into **TASK DB1**.

Make sure all the data is displayed and is easy to read.

RESAVE TASK DB1.

DO NOT PRINT at this stage.

(c) Answer these questions on document **TASK DB1**.

(i) Suggest a suitable validation rule for the **TITLE** field.

(1)

(ii) Explain why validation rules are used in a database.

(2)

RESAVE TASK DB1.

PRINT TASK DB1.

(Total for Task DB1 = 7 marks)

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 word processed document as **TASK DB2**.

(a) Leonie wants a list of walkers with **DOWNLEA** as the second line of their address.

The list should display the **TITLE**, **FIRSTNAME**, **LASTNAME** and **POSTCODE** only.

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

Display the results of your query/search.

(3)

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

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

RESAVE TASK DB2.

DO NOT PRINT at this stage.

Open the **COASTALWALK** table.

(b) Leonie wants a list of walks with a distance of 115 km or more.

The list should show **only** the fields **WALKNAME**, **REGION**, **DISTANCE** and **RATING** in this order.

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

Display the results of your query/search.

(4)

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

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

RESAVE TASK DB2.

PRINT TASK DB2.

(Total for Task DB2 = 7 marks)

Task DB3

The image shows the relationships between the tables in the database.
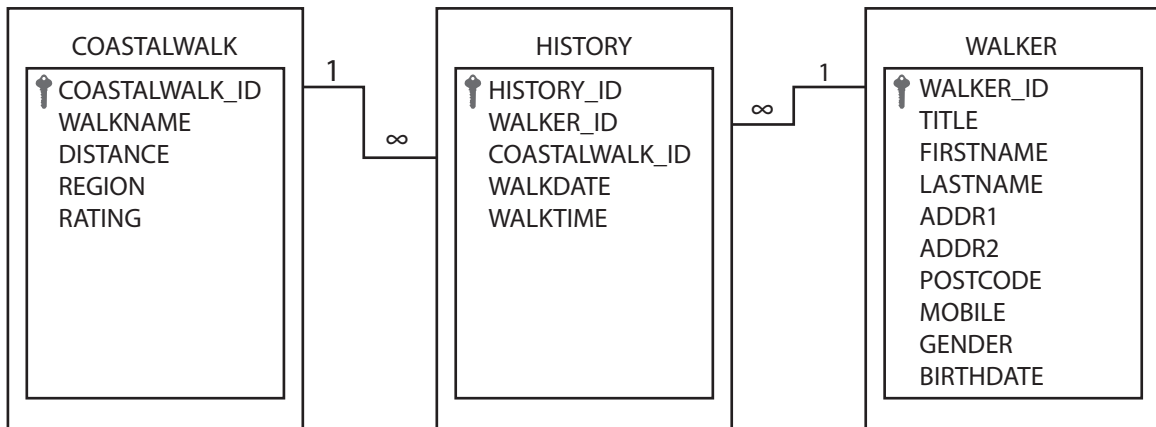
(a) Answer these questions on the document **TASK DB3**.

(i) Explain why the **WALKER_ID** field is required in both the **WALKER** and the **HISTORY** tables.

(2)

(ii) Explain why it is better to store the data in three tables rather than in just one table.

(2)

(b) Leonie wants a list of walkers who have completed either the Anglesey walk or the Durham walk.

The list should:

- show only the fields **FIRSTNAME**, **LASTNAME**, **BIRTHDATE**, **WALKNAME**, **WALKDATE** and **WALKTIME** in this order

- be sorted in ascending order of **WALKDATE** within ascending order of **WALKNAME**.

Create a query/search to produce this list from the linked tables.

Display the results of your query/search.

(5)

SAVE the query/search as DB3b.

Copy the results of your query/search into **TASK DB3**.

RESAVE TASK DB3.

PRINT TASK DB3.

(Total for Task DB3 = 9 marks)

Task DB4

Leonie wants to display the results of the query/search carried out in **part (b)** of **Task DB3** in a database report.

Create a database report to display the results.

The report must:

*   show only the fields **WALKNAME**, **FIRSTNAME**, **LASTNAME** and **WALKDATE** in this order

*   have a suitable title

*   have column headings that are easy to understand

*   fit onto **one** side of A4, landscape.

Enter **Task DB4**, 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.

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

PRINT the database report on **one** side of A4.

(Total for Task DB4 = 5 marks)

TOTAL FOR ACTIVITY 2 = 28 MARKS

Activity 3 – Using Art/Imaging and Graphics Software (AG) (suggested time 25 minutes)

Task AG1

Open a new document using word processing software.

Enter **Task AG1**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK AG1**.

(a) Leonie wants a design for a badge to put on t-shirts for the Pembrokeshire walking holiday.

Open a suitable graphics package.

Create a design for the badge.

The design must be fit for purpose and include:

*   the letters **OPR**

*   the words **Pembrokeshire Coast Walk 2017**

*   **one** suitable image from the **IMAGES** folder.

The badge design must be approximately 8cm x 8cm.

(5)

SAVE the badge design as **BADGE**.

Paste a copy of **BADGE** into **TASK AG1**.

RESAVE TASK AG1.

DO NOT PRINT at this stage.

(b) Answer this question in document **TASK AG1**.

Explain why your badge design is fit for purpose.

(2)

Make sure that **TASK AG1** is still on **one** side of A4.

RESAVE TASK AG1.

PRINT TASK AG1.

(Total for Task AG1 = 7 marks)

Task AG2

Open a new document using word processing software.

Enter **Task AG2**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK AG2**.

(a) Leonie wants to use the image **CAREW** on the group's website.

Open the image **CAREW** from the **IMAGES** folder in a suitable graphics package.

Crop the image so that:

   • the sky above the castle is removed

   • the water below the castle is removed

   • the trees on the left and right of the building are removed

   • the image remains rectangular and the whole castle is still visible.

(3)

SAVE the image as **CASTLE**.

Paste a copy of **CASTLE** into **TASK AG2**.

RESAVE TASK AG2.

DO NOT PRINT at this stage.

(b) Answer this question on document **TASK AG2**.

Explain **one** benefit of cropping the image **CAREW** before using it on the website.

(2)

RESAVE TASK AG2.

PRINT TASK AG2.

(Total for Task AG2 = 5 marks)

TOTAL FOR ACTIVITY 3 = 12 MARKS

Activity 4 – Using Web Authoring Software (WA) (Suggested Time = 30 minutes)

You may use any appropriate software for this activity.
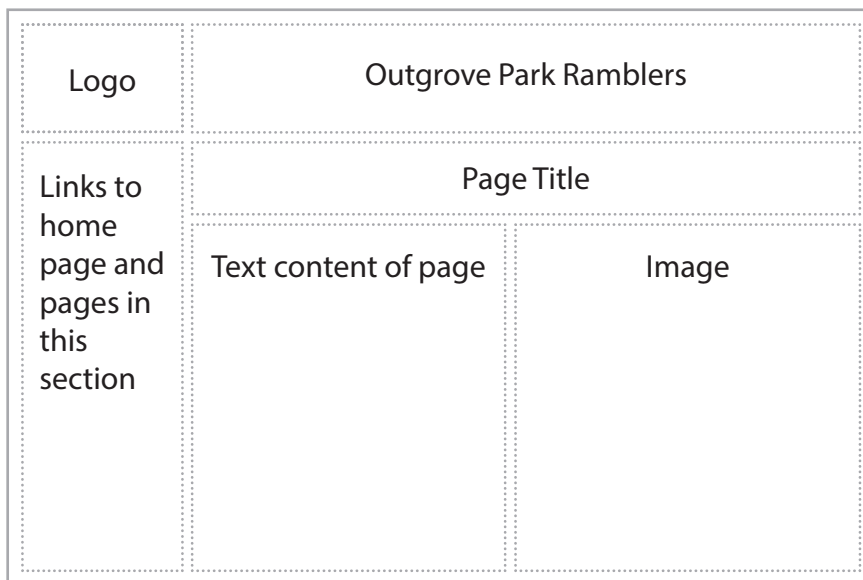
Task WA1

Outgrove Park Ramblers has a website that includes information about the activities of the group.

The home page of the website is **index.html**

Leonie wants to add a section about the walking holiday to the website.

The web pages in the new section will be saved as **SCHEDULE**, **WILDLIFE** and **LANDMARK**.

The three new web pages must be based on this design.

Logo	Outgrove Park Ramblers	
Links to home page and pages in this section	Page Title	
	Text content of page	Image

Website house style:

Background colour – pale green

Text colour – dark green

Use the logo and other suitable images from the **IMAGES** folder.

Text for the web pages is stored in **PEMBROKE**.

(a) Create web pages using the layout shown in the design.

- Create a web page about the schedule for the holiday.

SAVE the web page as **SCHEDULE**.

- Create a web page about wildlife that may be seen in Pembrokeshire.

SAVE the web page as **WILDLIFE**.

- Create a web page about landmarks in Pembrokeshire.

  Include the image **CASTLE** that you saved in **part (a)** of **Task AG2**.

SAVE the web page as **LANDMARK**.

(8)

(b) Make sure that your web pages are fit for purpose.

(5)

Open a new document using word processing software.

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

SAVE the word processed document as **TASK WA1**.

For **each** web page:

- display the web page on the screen

- make sure **all** the content is visible

- take a screen shot of the web page

- paste the screen shot into **TASK WA1**.

Make sure that **all** of the content of **each** of the three web pages is clearly visible.

RESAVE TASK WA1.

PRINT TASK WA1.

(Total for Task WA1 = 13 marks)

Task WA2

Open a new document using word processing software.

Enter **Task WA2**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK WA2**.

(a) Open your **WILDLIFE** web page.

Display the source code for the web page.

Highlight the hyperlink to your **LANDMARK** web page.

Copy the code that you have highlighted.

Paste the highlighted code into **TASK WA2**.

(2)

Make sure that the source code for the hyperlink to the **LANDMARK** web page is clearly visible.

RESAVE TASK WA2.

DO NOT PRINT at this stage.

(b) Answer this question on document **TASK WA2**.

The website uses dark green text on a pale green background as part of its house style.

Explain why organisations use a house style.

(2)

RESAVE TASK WA2.

PRINT TASK WA2.

(Total for Task WA2 = 4 marks)

TOTAL FOR ACTIVITY 4 = 17 MARKS

Activity 5 – Using DTP / Word Processing Software (WP) (suggested time 25 minutes)

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 word processed document as **TASK WP1**.

Leonie wants an information sheet for members about the walking holiday in Pembrokeshire.

Text for the information sheet is stored in **PEMBROKE** and **WALK**.

The information sheet must:

• fit **one** side of A4, portrait

• be clear and easy to read

• be fit for purpose.

It must include:

• the title from the file **WALK**

• the logo from the **IMAGES** folder

• Leonie's telephone number and email address from the **Scenario** (on page 3)

• the text from the file **WALK**

• the schedule from the file **PEMBROKE**

• **two** suitable images from the **IMAGES** folder.

Format the schedule as a table.

RESAVE TASK WP1.

PRINT TASK WP1.

(Total for Task WP1 = 11 marks)

Task WP2

Open a new document using word processing software.

Enter **Task WP2**, your name, candidate number and centre number in the footer of the document.

SAVE the word processed document as **TASK WP2**.

Answer these questions on document **TASK WP2**.

(a) A spellchecker can be used to reduce errors in a document.

Explain why proofreading is still required after using a spellchecker.

(2)

(b) You were asked to format the schedule as a table.

Explain why a table is an appropriate way of displaying the schedule.

(2)

RESAVE TASK WP2.

PRINT TASK WP2.

(Total for Task WP2 = 4 marks)

TOTAL FOR ACTIVITY 5 = 15 MARKS
TOTAL FOR PAPER = 100 MARKS

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