## Edexcel IGCSE

## Information and Communication Technology

Paper 2: Practical Paper

| $20-24$ June 2011 | Paper Reference |
| :--- | :--- |
| Time: 3 hours | $\mathbf{4 1 7 0 / 0 2}$ |

## You must have:

Short treasury tag, Cover Sheet, Data files: COMPETITION, GRAPHICS, PENMAWR, PENTATHLON, TEXT, TIMES

## 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 $\mathbf{1 0 0}$ marks.
- The marks for the parts of tasks are shown in round brackets: e.g. (2).


## Advice

- Read through the instructions on Page 2.
- Attempt ALL activities.
- Take breaks away from the computer from time to time.
- Label your printouts clearly as instructed in each task.


## 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.
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 Art/Imaging and Graphics Software (AG) | 10 | PENMAWR, GRAPHICS |
| 2 | Using Spreadsheet Software (SS) | 22 | TIMES |
| 3 | Using DTP/Word Processing Software (DTP/WP) | 14 | TEXT, GRAPHICS |
| 4 | Using Database Software (DB) | 29 | COMPETITION |
| 5 | Using Presentation Software (PS) |  | 25 |
|  |  | Total Marks | $\mathbf{1 0 0}$ |

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

## Scenario

Karen Bailes is the manager of Penmawr Fitness Club (PFC).
The contact details of the club are:
Address: Penmawr Fitness Club, High Street, Penmawr, PN1 8YY
Phone: 01124478647
Website: www.penmawr.org.uk
Karen is organising an Indoor Pentathlon competition.
There are five events - cycling, rowing, running, swimming and walking.
Competitors will be organised into age groups.
Competitors pay a $£ 5$ entry fee.
Prizes have been donated by local sponsors.

## Activity 1 - Using Art/Imaging and Graphics Software (AG)

Karen wants a logo for the Indoor Pentathlon. She has started to create the logo.
This is saved as PENMAWR.

## Task AG1

Open a new document using word processing software.
Enter Task AG1 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK AG1.
(a) (i) Insert the graphic PENMAWR into the document TASK AG1.

Karen is not happy with her design.
(ii) Use text boxes to identify two aspects of the design which should be improved.

RESAVE TASK AG1.
DO NOT PRINT at this stage.
Open a suitable graphics package.
(b) (i) Create a new logo for the Indoor Pentathlon.

The logo must include:

- one image from the GRAPHICS file
- the letters PFC.
(ii) Check that the finished logo is fit for purpose.

SAVE this logo as PFC.
Paste a copy of PFC into TASK AG1.
RESAVE TASK AG1.
DO NOT PRINT at this stage.
(c) Explain in document TASK AG1 why your design is an improvement on Karen's original.

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

## Activity 2 - Using Spreadsheet Software (SS)

Karen wants to use a spreadsheet to record the competition results. She has created the file TIMES and entered some test data. The results are shown in seconds.

## Task SS1

Open the spreadsheet TIMES.
Enter Task SS1 and your name, candidate number and centre number in the footer of the spreadsheet.
SAVE the spreadsheet as TASK SS1.
(a) Karen wants to improve the layout of the spreadsheet.
(i) Merge cells A1 to J1. Enter the title PENTATHLON RESULTS - BOYS into the merged cell.
(ii) Format the title in row 1 to font size 20 , bold.
(iii) Format the labels in row 3 to be bold and centred.
(iv) Format the spreadsheet so that all the data is visible.
(v) Use borders and/or shading to make the spreadsheet easier to read.

RESAVE TASK SS1.
DO NOT PRINT at this stage.
(b) A new competitor needs to be added to the spreadsheet.
(i) Insert a new row between row 5 and row 6 .
(ii) Enter this data into the new row.

| Brunning | James | 16 | 365 | 556 | 667 | 449 | 364 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## RESAVE TASK SS1.

PRINT TASK SS1 on one sheet of A4.
Make sure that all the data is visible.

Task SS2
Change Task SS1 to Task SS2 in the footer of your spreadsheet.
SAVE the spreadsheet as TASK SS2.
Karen wants to use the spreadsheet for calculations.
(i) Enter a formula in cell I4 to calculate the total time (in seconds) for Martin Anderson.

Competitors qualify for the final if their total time is 2400 seconds or less.
(ii) Enter a formula in cell J 4 that will:

- display "Yes" if Martin Anderson has qualified
- leave the cell blank if he has not qualified.
(iii) Replicate the formulae in cells I4 and J4 for the other competitors.


## RESAVE TASK SS2

PRINT the spreadsheet on one sheet of A4 showing the FORMULA view.
You should:

- make the page landscape
- make sure the columns are wide enough to display all of the information
- show the gridlines
- show the row and column headers.


## Task SS3

Open a new document using word processing software.
Enter Task SS3 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK SS3.
(a) Karen would like to present the boys' results as a graph.

Using spreadsheet TASK SS2 create a graph which displays the total time for each boy.

The graph must:

- be fit for purpose
- have a suitable title and labels
- display boys'first names
- not display unnecessary information.
(b) Copy the graph into TASK SS3. Make sure it is suitable to be printed on an A4 sheet and displayed on a notice board.


## RESAVE TASK SS3.

PRINT TASK SS3.

## Activity 3 - Using DTP/Word Processing Software (DTP/WP)

Karen wants to display an A4 poster about the competition in local shops.
These files are available:

- information about the competition in TEXT
- images in GRAPHICS.


## Task WP1

Open a new document using word processing software.
Enter Task WP1a and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK WP1a.
(a) Select appropriate information from the file TEXT and images from the GRAPHICS file to create a poster to advertise the Indoor Pentathlon competition.
(i) The poster should include:

- the logo you created in Activity 1
- a suitable image from the GRAPHICS file
- a suitable title
- relevant information about the competition.
(ii) Check that the finished poster is fit for purpose.


## RESAVE TASK WP1a.

PRINT TASK WP1a.

Open a new document using word processing software.
Enter Task WP1b and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK WP1b.
(b) Display the poster created in TASK WP1a on screen. Make sure the whole poster is visible.
(i) Take a screen shot of the poster. Paste the screen shot into TASK WP1b.
(ii) In document TASK WP1b explain one feature you used to make the poster fit for purpose.

You should:

- identify the feature and where it was used
- describe how it made the poster fit for purpose.

RESAVE TASK WP1b.
PRINT TASK WP1b.

## Activity 4 - Using Database Software (DB)

The COMPETITION database has two tables:

- COMPETITOR
- CLUB

Karen has stored details of competitors in the COMPETITOR table. Some of the competitors are members of Penmawr Fitness Club, some are members of other clubs and some do not belong to any club.

## Task DB1

Open the COMPETITION database.
The structure of the COMPETITOR table is:

| Fieldname | Data Type | Description |
| :--- | :--- | :--- |
| CompetitorID | Autonumber | Unique code for each competitor |
| FName | Text | Competitor first name |
| LName | Text | Competitor last name |
| ClubRef | Text | Competitor club reference |
| DoB | Date/Time | Competitor date of birth |
| Gender | Text | M for male, F for female |
| Phone | Text | Competitor phone number |

A new competitor needs to be added to the table. His details are:

| CompetitorID | Automatically added |
| :--- | :--- |
| First name | Reuben |
| Last name | Jones |
| Club reference | CAR62 |
| Date of birth | 7 May 1985 |
| Gender | Male |
| Phone | 01125656654 |

(i) Enter this data into the COMPETITOR table.
(ii) Sort the table into ascending order of date of birth.

Open a new document using word processing software.
Enter Task DB1 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK DB1.
(iii) Set the orientation of TASK DB1 to landscape.

Copy and paste the COMPETITOR table data into TASK DB1.
Make sure that all the data is displayed on one sheet of A4.

RESAVE TASK DB1.
PRINT TASK DB1.

## Task DB2

Open a new document using word processing software.
Enter Task DB2 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK DB2.
(a) Karen wants to see all the details of competitors who are members of club CAR67.

Create a query/search to find this information from the COMPETITOR table.
Remember to include all fields.
SAVE the query/search as DB2a.
Display the results of your query/search.
Copy the results into TASK DB2.

## RESAVE TASK DB2.

DO NOT PRINT at this stage.
(b) Karen wants a list of male competitors who are members of club SWA44.

The list should:

- show only the fields FName, LName, DoB and Phone
- be in ascending order of LName.
(i) Create a query/search to produce this list from the COMPETITOR table.

SAVE the query/search as DB2b.
(ii) Display the design of your query/search.

Remember to make sure that the display shows the required information including the search criteria and the sorting.

Paste screen shots of the design into Task DB2.

Note: you may need to produce more than one screen shot to display both the searching and sorting.

RESAVE TASK DB2.
PRINT TASK DB2. Make sure it fits on one sheet of A4.

## Task DB3

Open a new document using word processing software.
Enter Task DB3 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK DB3.

The CLUB table contains contact details of the clubs. The CLUB table needs to be linked to the COMPETITOR table.
(a) Create a link (relationship) between the two tables.

Display the relationship on the screen.
Make sure all fields are displayed.
Take a screen shot of the relationship.

Paste the screen shot into TASK DB3.
RESAVE TASK DB3.
DO NOT PRINT at this stage.
(b) Identify a primary key on the screen shot.
(c) Karen wants a list of female competitors who were between the ages of 16 and 21 on 1 January 2011.

This means that they were born:

- after 31 December 1989
and
- before 2 January 1995.

The list should show only fields LName, FName, DoB, ClbName, ClbHead, and ClbTel.

Create a query/search to find this information from the two linked tables.

SAVE the query/search as DB3.
Paste the results of your query/search into TASK DB3.
RESAVE TASK DB3.
PRINT TASK DB3.

## Task DB4

Karen wants a database report based on the results of the query/search carried out in Task DB3.

Create a database report to display these results.
In the database report:

- add a suitable title
- show only the fields FName, LName, ClbName in this order
- do not group records
- sort the results in ascending order of LName within ascending order of ClbName
- customise the column headings to make them easier to understand
- enter Task DB4 and your name, candidate number and centre number in the page footer of the database report.

Check that the layout and content of the database report is fit for purpose.
Make sure the database report fits onto one sheet of A4.
SAVE the database report as TASK DB4.
PRINT the database report.

TOTAL FOR ACTIVITY 4 = 29 MARKS

## Activity 5 - Using Presentation Software (PS)

Karen wants a slide show to encourage members of other fitness clubs to enter the competition. She has produced a title slide (saved as PENTATHLON) using the settings on the master slide. She wants three more slides in the presentation.

These are her original designs for the slides.

Title slide (slide 1)


Other slides


These files are available:

- information about the competition in TEXT
- images in GRAPHICS.


## Task PS1

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

SAVE the presentation as ACTIVITY5.
Open a new document using word processing software.
Enter Task PS1 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK PS1.
(a) Edit the master slide to make changes to the settings for the presentation.
(i) The blue background is too dark. Change it to a more suitable shade.

The logo is not on the master slide at present. You need to add it.
(ii) Add the logo you created in Task AG1 to the bottom left-hand corner of the master slide.
(iii) Change the default font to a sans serif font.
(iv) Enter your name and candidate number in the centre footer area of the master slide. Add the slide number in the right footer area.
(v) Display the master slide on screen. Make sure the whole slide is visible.

Paste a screen shot of the master slide into TASK PS1.
Identify the changes you have made to the master slide.

## RESAVE ACTIVITY5.

RESAVE TASK PS1.

## PRINT TASK PS1.

(b) Your task is to produce three other slides using information from the files TEXT and GRAPHICS and the layout shown in Karen's original design. You do not have to use all the text.
(i) Create slide 2 to describe features of the competition.
(ii) Create slide 3 to detail prizes and gifts for competitors.
(iii) Create slide 4 to explain how to:

- find out more about the competition
- enter the competition.


## RESAVE ACTIVITY5.

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

## Task PS2

Open a new document using word processing software.
Enter Task PS2 and your name, candidate number and centre number in the footer of the document.

SAVE the document as TASK PS2.
(a) Karen wants to encourage more 11 to 14 year old girls to enter the competition.
(i) Change slide 3 to make it more appealing to this group.

Take a screen shot of slide 3 that shows the changes you have made. Paste the screen shot into the document TASK PS2.
(ii) In document TASK PS2 explain how the changes you have made will make it more appealing to the target group.

SAVE the presentation as ACTIVITY5a.

## RESAVE TASK PS2.

(b) Karen would like to change the presentation so that, once started, it runs continuously without user intervention.
(i) Change the presentation so that it runs continuously without user intervention.

Take screen shots of slide 1 that show the changes you have made. Paste the screen shots into the document TASK PS2.
(ii) In document TASK PS2 explain how the changes you have made will enable the presentation to run continuously without user intervention.

RESAVE ACTIVITY5a.
RESAVE TASK PS2.
PRINT TASK PS2. Make sure it fits on one sheet of A4.

## TOTAL FOR ACTIVITY 5 = 25 MARKS TOTAL FOR PAPER = 100 MARKS

