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**INFORMATION TECHNOLOGY**

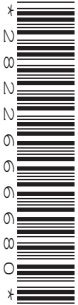
**9626/02**

Paper 2 Practical

**May/June 2017**

**2 hours 30 minutes**

Additional Materials:      Candidate Source Files:  
Evidence.rtf  
TTSMerge.csv  
TTSPay\_Scales.csv  
Branch\_Analysis.csv  
Bee.mp4  
Countryside.mp3  
DoveCall.wav  
Flowers.mp4  
Leaves.mp4



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**READ THESE INSTRUCTIONS FIRST**

DO **NOT** WRITE IN ANY BARCODES.

Carry out **every** instruction in each task.

Save your work using the file names given in the task as and when instructed.

The number of marks is given in brackets [ ] at the end of each task or part task.

Any businesses described in this paper are entirely fictitious.

You must **not** have access to either the internet or any email system during this examination.

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This document consists of **5** printed pages and **3** blank pages.

You are working for Tawara Technology Solutions (TTS).  
 You are required to carry out some data handling and media tasks.  
 You must use the most efficient method to solve each task.  
 You are required to complete the Evidence Document called **Evidence.rtf**

All files saved should include your Centre number and candidate number; e.g. Evidence\_XX999\_1234

The company is going to centralise the management of several European branches.  
 You have been provided with the following files:

**TTSMerge.csv**  
**TTSPay\_Scales.csv**  
**Branch\_Analysis.csv**

Details of staff in the branches are in the file **TTSMerge.csv**

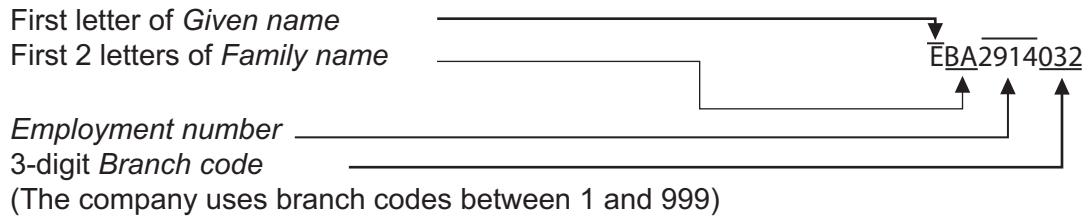
Open the file to inspect the data.

Re-save the file as a spreadsheet named **TTSMerge\_Centre number\_candidate number**

- 1 (a) Insert a row above the data.  
 Set the row height to 51 points.  
 Merge the cells in columns A to D of this row.  
 In the merged cell, insert a function to display the **current** date and time.  
 Format the date and time like this: Tuesday 21 November 2017 09:45
- Merge the cells in columns E to I of this row.  
 Insert your Centre number and candidate number in the merged cell.
- Display both merged cells in an 18 point sans-serif font and ensure all the data and text is fully visible.
- Save the spreadsheet. [6]
- (b) It has been decided to use a different mail server for the company. All the new addresses will end in **@tts.com**
- Each email address will have a new format. For example, *Evie Barber* will become **e.barber@tts.com**  
 Use formulae to replace all the addresses in the file. Ensure they are all lowercase.
- Save the spreadsheet. [5]
- (c) Analyse the method of generating the new email addresses and identify the problem that this method causes.
- In your Evidence Document:
- describe the problem
  - describe a method to automatically detect this problem
  - give an example of an email address that is affected
  - suggest a method of correcting this address.
- Correct the addresses and save the spreadsheet.
- Place in your Evidence Document screenshots of the corrected email addresses. [7]

(d) All staff will have a new payroll number as shown below:

| Given name | Family name | Email            | Employment number | Payroll number | Pay scale | Branch code |
|------------|-------------|------------------|-------------------|----------------|-----------|-------------|
| Evie       | Barber      | e.barber@tts.com | 2914              | EBA2914032     | C3        | 32          |



Use formulae to generate the new payroll numbers.  
Save the spreadsheet.

[7]

- (e) TTS have introduced a new pay structure for the company.  
The *Pay scale* is used to determine the pay using **TTSPay\_Scales.csv**  
Open this file and inspect the data.

In your TTSMerge file, insert formulae in the *Pay* column to display the pay for each member of staff.

Display the *Pay* column as Euros (€) with 0 decimal places.

[10]

- (f) For each branch, display subtotals for the total pay and the average pay.

Members of staff on the **E** pay scale are members of the company executive. Their pay must **not** be included in the subtotals but their data must **not** be deleted from the spreadsheet.

Save the spreadsheet as **Pay\_Centre number\_candidate number**

[6]

- (g) The subtotals for each branch should be recorded in the *Branch\_Analysis* file. The data in this file must update automatically and reflect any changes to staff pay.

[4]

- (h) Create a chart displaying both the *Total pay* and *Average pay* for each branch.  
Label the chart appropriately.  
Display the *Average pay* values.

Save the *Branch\_Analysis* file.

[6]

- (i) In your Evidence Document answer the following question:

What is the difference between a spreadsheet formula and a spreadsheet function?  
Give an example of each from your TTSMerge file.

[4]

- 2 TTS has been commissioned to create a short video to promote a forthcoming Protecting Nature conference in London during January 2018.

You have been provided with the following files:

**Leaves.mp4**  
**Flowers.mp4**  
**Bee.mp4**  
**Countryside.mp3**  
**DoveCall.wav**

You are required to create the video for showing with an aspect ratio of 16:9 (Widescreen) and a resolution of 1280 × 720 pixels.

There must be a transition between the video clips.

The new video must begin with:

- a title clip, 4 seconds long
- the text **Protecting Nature** displayed for 2 seconds
- the text **January 2018** displayed for the remaining 2 seconds.

The text must be in a white 48pt sans-serif font and in the centre of the frames.

Add the **Leaves.mp4** video clip after the title frames.

Trim the clip so that it is 5 seconds long.

Add the caption **A chance to hear about how to protect our environment** in the same white 48pt sans-serif font and in the centre of the frames.

Add the **Flowers.mp4** video clip after the *Leaves* clip.

Trim the *Flowers* clip so that it is 7 seconds long with the caption **An international conference with noted scientists** in the same white 48pt sans-serif font and in the centre of the frames.

Add the **Bee.mp4** video clip after the *Flowers* clip.

Trim the *Bee* clip to end after the bee leaves the frame.

Add the caption **London** to appear after 1 second and show for 3 seconds.

Add the caption **January 2018** to show for the remainder of the clip. The text must be in a black 48pt sans-serif font.

These captions must be centre aligned at the bottom of the frames.

Save or export the movie as **NatureConference.mp4**

[35]

- 3 (a) You are required to add a soundtrack to the movie.  
Open the file **Countryside.mp3** in an audio editing application.

Convert the sound file to monophonic.  
Edit the audio clip so that only birdsong can be heard.  
Amplify the sound to the maximum volume without clipping.

Choose an appropriate section and trim the audio to the same duration as the movie created in task 2.

Insert the **DoveCall.wav** audio clip in two of the quieter periods of the soundtrack file without extending the length of the clip.

Export the audio as **Soundtrack128.mp3** at 128 kbps.  
Add the *Soundtrack128.mp3* file to the movie and resave the movie.

[12]

- (b) Open the **DoveCall.wav** file.  
Export the audio as **DoveCall128.mp3** at 128kbps.  
Export the audio as **DoveCall256.mp3** at 256kbps.

In your Evidence Document answer the Audio questions.  
Save your Evidence Document.

[8]

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