## Cambridge International AS \& A Level

## INFORMATION TECHNOLOGY

9626/02
Paper 2 Practical
October/November 2022
2 hours 30 minutes

## You will need: Candidate source files (listed on page 2)

## INSTRUCTIONS

- Carry out every instruction in each task.
- Save your work using the file names given in the task as and when instructed.
- You must not have access to either the internet or any email system during this examination.
- You must save your work in the correct file format as stated in the tasks. If work is saved in an incorrect file format, you will not receive marks for that task.


## INFORMATION

- The total mark for this paper is 90
- The number of marks for each question or part question is shown in brackets [ ].

You have been supplied with the following source files:

```
n22english.csv
n22it.csv
n22maths.csv
n22science.csv
n22student.csv
n22teo.mp4
n22voiceover.mp3
```

You must use the most efficient method to solve each task. All documents and videos produced must be of a professional standard and suit the business context.

Create a new document to use as an Evidence Document. Save this document in rich text format with the file name N22_ followed by your centre number_candidate number e.g. N22_ZZ999_9999.rtf

Place your name, centre number and candidate number in the header of your Evidence Document.
Save your Evidence Document.
You work for Tawara High School which has chosen to support the Tawara Elephant Orphanage for its annual charity event. You will create a short video to show to the students. The original video clip was recorded by GBRvideo and the audio was recorded by KMBaudio.

1 Open the file n22teo.mp4 in your video editing software. Make sure the aspect ratio is 16:9. Remove the end of the clip so that only the first 22 seconds remain. Remove all sound from the clip.

Use pan and zoom to remove the crowd on the left of the frames from the start of the video clip. Keep the elephant in the frames at all times.

Save your video clip in .mp4 format with a resolution of $1280 \times 720$ and the file name teo2_ followed by your centre number_candidate number e.g. teo2_ZZ999_9999

2 Take a still image of the first frame of the clip saved in step 1.
Save it with the file name teo1 in a format suitable for importing into your video editing software.

3 Take a still image of the last frame of the clip saved in step 1.
Save it with the file name teo3 in a format suitable for importing into your video editing software.

4 Use the files saved in steps 1 to 3 to create a video clip to match this storyboard.
All text should be displayed in a consistent sans-serif font.
Do not use transitions.
Time 0 seconds:
Background image teo1 displayed
The text Charity event placed as a title in the top left corner.
Time 3 seconds:

The title text and background remain, with the subtitle Tawara Elephant Orphanage added below the title.

Time 6 seconds:

All elements added so far remain, with the text Help us to support them added as a new line below the existing text.

Time 9 seconds:

Video file teo2_ saved at step 1 starts.
Audio clip n22voiceover.mp3 starts.

No text displayed.

Time 31 seconds:

Background image teo3 displayed.

Display appropriate credits to scroll up the screen, including the text Edited by: and your name, centre number, candidate number.

5 Save your video clip in .mp4 format with a resolution of $1280 \times 720$ and the file name teo4_ followed by your centre number_candidate number
e.g. teo4_ZZ999_9999

You will design a database about students and their classes. Each student studies 4 subjects and is only in one class per subject. The timetable for each subject is currently stored in a separate file. These files will be merged into a single file suitable for importing into a database normalised to third normal form (3NF).

6 Open the files:

```
n22english.csv
n22it.csv
n22maths.csv
n22science.csv
```

Analyse the contents of these files.
Place in your Evidence Document screenshots of the method you use to manipulate the contents of $\mathbf{n 2 2 e n g l i s h . c s v}$ so that it has the same layout as the other 3 files.

Save this file as n22english1.csv

7 Merge the files:

```
n22english1.csv
n22it.csv
n22maths.csv
n22science.csv
```

Save the merged file as n22timetable.csv

8 Open the files:

## n22student.csv <br> n22timetable.csv

Analyse the contents of these files.
Create, in your Evidence Document, a physical entity relationship diagram to design the database to third normal form (3NF) using only this data.

Save your Evidence Document.

9 Use your entity relationship diagram and the data files opened in step 8 to create a relational database normalised to third normal form (3NF). Enforce referential integrity in all relationships.

Save your database as THS_followed by your centre number_candidate number e.g. THS_ZZ999_9999

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