

Cambridge International AS & A Level

INFORMATION TECHNOLOGY

Paper 2 Practical

9626/02

February/March 2020

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 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 you save work in an incorrect file format, you will **not** receive marks for that task.

INFORMATION

- The total mark for this paper is 110.
- The number of marks for each task or part task is shown in brackets [].

You have been supplied with the following source files:

20-AME.rtf 20-Intem.csv 20-motherboard.csv 20-TGC1.mp4 20-Voice.mp3

You work for Tawara Gaming Computers and will create part of a database to store components. As prices of each item can change daily, the price will only be stored in the database if an item is in stock. Data about processors and motherboards used by the company but not held in stock will still be stored in the database.

Use your local currency where appropriate. Format this to 2 decimal places.

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

You are required to provide evidence of your work, including screen shots at various stages. Create an Evidence Document named:

M20_centre number_candidate number.rtf

e.g. M20 ZZ999 9999.rtf

Place your name, centre number and candidate number in the header of your Evidence Document.

1 Examine the data in the files:

20-AME.rtf 20-Intem.csv

Analyse the contents of these files; each contains details of processors made by a manufacturer. Combine these files into a spreadsheet that is suitable for importing as a database table.

Save the new file as **M20PROC_** followed by your centre number_candidate number e.g. M20PROC_ZZ999_9999

[6]

2 Each computer processor fits into a special socket on the motherboard. Different motherboards have different processor sockets; some sockets fit processors from more than one manufacturer. A processor can be fitted to many different types of motherboard. Some motherboards can be fitted with different types of processor.

The motherboards used by this company are held in the file **20-motherboard.csv**

Analyse the contents of this file and the one saved in step 1.

You will plan and create a relational database to store the data for the:

- processors
- motherboards.

Create a data dictionary in your Evidence Document. Include details of the tables, records, fields, data types and any other relevant information. [26]

EVIDENCE 1

Your data dictionary.

3 Using your data dictionary and the files saved in tasks 1 and 2, create a database named **Tawara**______ followed by your centre number candidate number

3

e.g. Tawara ZZ999 9999

[20]

4 Create a report for a customer who requires a list of all the i7 processors with a speed of at least 3.7 GHz and motherboards that are currently in stock that support these processors and support DDR4 memory.

This report must include all the details of the processors and motherboards. Do **not** show any duplicated records.

For each combination of motherboard and processor, calculate the total price of the two items.

Group this report by processor model, then by motherboard manufacturer.

Include all the processor details in each group header and the motherboard details (except Socket) and total price in the body of the report.

Embolden the total price. The report must fit on a single portrait page wide with appropriate font sizes.

Include an appropriate title for the report that includes your name, centre number and candidate number. [22]

EVIDENCE 2

Your database.

5 Export this report as **FASTi7_** followed by your centre number_candidate number in **portable document format** (pdf).

e.g. FASTi7_ZZ999_9999

[1]

EVIDENCE 3

Your pdf document.

Tawara Gaming Computers will create a number of instructional video clips showing how to access the components in their computers.

You will create one of these short video clips. The original video clip was recorded by GBRvideo and the audio was recorded by KMBaudio.

All video and audio clips produced must be of a professional standard and suit the business context.

6 Open the file **20-TGC1.mp4** in your video editing software. Set the aspect ratio to 16:9. Remove the first 4 seconds of the clip. Remove all sound from the clip.

Save your video clip in **.mp4 format** with a resolution of 1024 × 576 and the filename **TGC2_** followed by your centre number_candidate number

e.g. TGC2_ZZ999_9999

[5]

EVIDENCE 4

Your video clip.

7 Take a still image of the first frame of this clip.

Save it with the filename **TGC3** in a format suitable for importing into your video editing software. [2]

EVIDENCE 5

Your still image.

8 Use the files saved in steps 6 and 7 to create a video clip to match the following storyboard.

All text should be displayed in a consistent sans-serif font.

Do **not** use transitions unless instructed to do so.

Time 0 seconds:

Background image **TGC3** Name of the company, placed as a title in the top left corner

Time 3 seconds:

The title text and background remain, with the text **An introduction to your gaming desktop** added below the title

Time 6 seconds:

All elements added so far remain, with the text **How to access the components** added to the existing text

Time 9 seconds:

Smooth 2-second transition (between 9 and 11 seconds) into the video file saved in step 6

Audio clip 20-Voice.mp3 starts

No text displayed

Time 29 seconds:

Set a black background. Display appropriate credits to scroll up the screen. Include the text **Edited by:** and your name, centre number and candidate number in the credits.

[27]

[1]

9 Export your video clip as TGC4_ followed by your centre number_candidate number in .mp4 format

e.g. TGC4_ZZ999_9999

EVIDENCE 6

Your video clip.

Save your Evidence Document.

BLANK PAGE

6

BLANK PAGE

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.