



INFORMATION TECHNOLOGY

9626/04

Paper 4 Advanced Practical

For Examination from 2017

SPECIMEN PAPER

2 hours 30 minutes

Additional Materials: Candidate Source Files

READ THESE INSTRUCTIONS FIRST

DO **NOT** WRITE IN ANY BARCODES.

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

Save your work using the file name 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.

This document consists of **5** printed pages and **1** blank page.

- 1 You work for *International Ski Tours (IST)*. *IST* are a company that runs ski tours all over the world. You are going to carry out several tasks for the company.

Open each of the following files and inspect the image or data. These files will be used in part of the tasks you have been set.

evidence.rtf
accommodation.jpg
slopes.jpg
family.jpg
ISTDraw.html
customer_details.csv
instructor_details.csv

Create a logo for *IST*.

Use two circles as the background.

Make one circle larger with a smaller circle inside it. The larger circle must be light blue and the smaller circle dark blue. There must be a suitable distance left between the smaller and larger circle to insert the company's name.

Draw a white outline to represent a picture of three mountains inside the smaller circle.

Insert the company's name in the space between the smaller circle and larger circle. The text must fit and go round the smaller circle, from left to right, covering approximately the top half of the circle.

Make the text a suitable colour and add an outline and a shadow to it.

Draw two skis and add them to the logo. The skis must be the correct size to fit inside the large circle.

Make the skis cross over at the bottom, as shown in the picture.



Place the skis in front of the larger and smaller circle, but behind the mountains and the text.

Resize the image to 150 pixel × 150 pixel.

Save the logo as a .jpg file with the file name **IST_logo_** followed by your Centre number_ candidate number [12]

- 2 Open the file **evidence.rtf** This will be your Evidence Document for the remainder of the examination.
 Place your name, Centre number and candidate number in the header.

You are required to give details of the differences between Bitmap graphics and Vector graphics.

Complete the **Image files** table giving short explanations in each cell.
 Save the document. [10]

- 3 *IST wants an animated advertisement to appear on their website. The placeholder on the website will be 300 pixels high and 500 pixels wide.*

Create an animation for IST. Place the IST logo at the start of the animation.

Make the IST logo appear small in size at first and gradually grow to a suitable size to fill the centre of the frame.

Make the animation of the logo look smooth.

You are going to animate three images to start their animation as soon as the logo animation has grown to fill the centre of the frame.

Animate the three images:

- **accommodation.jpg**
- **slopes.jpg**
- **family.jpg**

Make each image:

- display for a suitable time
- fade in and then fade out into the next image
- display the appropriate text in the bottom right-hand corner of the image:
 - Luxury accommodation
 - World class slopes
 - Fun for all the family

The fading must be suitably timed. The final image must fade out.

Make sure that the text on each image is clearly visible.

The text must fade in and fade out with the image.

Make the animation between the images and text look smooth.

Make the animation play continuously.

Export the animation in a suitable file format for use in a website, with the file name **IST_advert_** followed by your Centre number_candidate number [15]

- 4 In your Evidence Document, using no more than 50 words, explain what tweening is and how it is used in animation. [2]
Save the document.

- 5 *IST wants a booking system for their staff to manage the booking of ski lessons with their instructors. IST wants all the customers' and instructors' data to be stored in a database.*

The database should be named **ski_bookings_** followed by your Centre number_candidate number

Import the files **customer_details.csv** and **instructor_details.csv** into suitable software to create the ski lesson booking system.

Create appropriate tables, field names, data types and relationships to enable ski lesson bookings to be made.

To make a ski lesson booking, IST want a user to be able to select the following from a list for the booking:

- customer
- instructor
- date
- time

IST want users to be able to select the times from the following list:

- 09:00
- 10:30
- 12:00
- 14:30
- 16:00
- 17:30

IST would like a ski lesson booking form to create and view bookings.

Create a ski lesson booking form where a user can select for the booking:

- customer
- instructor
- date
- time

The list of instructors available for selection should be restricted to those that match the level of the customer.

The form should also automatically display the:

- customer's level
- customer's age
- instructor's level
- price of the lesson

Make the customer's level and age appear automatically when the customer is selected.

Make sure that the instructor that can be selected can only be an instructor appropriate for that customer's skiing level and no other level.

Assume that adults are people 18 years and over and a child is under 18 years of age.

Make the price of a lesson with the selected instructor display correctly depending on the age of the customer.

Add the company logo to the form with suitable navigation and operation buttons to search and manage records. [40]

- 6 *IST wants a prize draw quiz page for their website. The page has already been started. You are required to complete it.*

Open **ISTDraw.html** in your browser.

Users enter their choices, 1, 2, or 3, in the boxes with input ids: Answer1, Answer2, and Answer3 and click on “Test your answers”.

The correct answers for the quiz are:

1. International Ski Tours – (option 2)
2. Luxury accommodation – (option 3)
3. All the family – (option 2)

Using **ISTDraw.html** add the JavaScript code to achieve the following:

- When users click to submit their choices, the script must display an alert displaying the number of correct answers and suitable explanatory text
- When the alert is dismissed the number of correct answers must be displayed in the box with input id =“count” under the “Number of correct answers” label
- For 3 correct answers display the text, “Well done” at the id=“response” placeholder under the count box.
 - the text “Enter draw” should appear at the id=“Enter” placeholder under the Prize Draw Quick Quiz heading
- If any answers are incorrect:
 - the incorrect entries should be deleted
 - the text “Click here to try again” Should be displayed under the count box at the id=“response” placeholder
 - Clicking “here” should reload the page

Add comments to your code to explain the important steps or sections

Save the webpage as **ISTDraw_your name_Centre number_candidate number.html** [25]

- 7 Use the **Data types table** in your Evidence Document to list the most commonly supported data types in programming languages, giving examples of each type.

Save your Evidence Document. [6]

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Question 8 © Ref: 183742442; Adie Bush; Male skier in action; www.gettyimages.co.uk.
Question 8 © Ref: 119705048; db2stock; USA, Colorado, Telluride, Three-generation family with girl (10-11) posing during ski holiday; www.gettyimages.co.uk.

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