Mark Scheme (Results)

Summer 2021

Pearson Edexcel International GCSE

In Information and Communication Technology (4IT1)

Paper 02: Practical Paper

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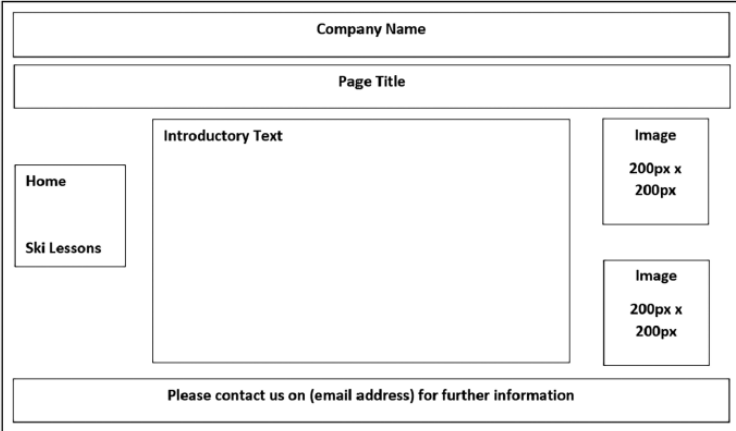
General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

June 2021 – Skiing

Task	Answer	Marks
	Section A	
A1	**Graphics**	
a	Logo: 1. combination of lines **or** shapes (1) – do not award for a single line or shape	1
	2. clearly represents skiing (1)	1
	3. include 'TSR' - do not award if 'The Ski Run' has been included (1)	1
b	*Any image edited to*: 1. include the company name The Ski Run (1) • allow 'THE SKI RUN' or 'The Ski Run' or 'the ski run' – accept upper case, title case or lower case. • only award the mark for the correct spelling • do not accept 'TSR' • only award the mark if the company name is appropriately sized and positioned • award the mark if the logo includes the company name.	1
	2. include the logo (1) • only award the mark if the logo is appropriately sized and positioned.	1
	Total for Task A1	**5**

A2	Database	Marks
a	*Data entry form:* 1. Logo from Task A1a is included (1)	1
	2. Logo positioned top right to follow the house style (1)	1
	3. Includes a suitable title – reference to Hotels/Accommodation (1)	1
	4. Hotel ID field is 2 cm wide – award the mark if the screenshot is missing but the field is obviously smaller (1)	1
	5. Hotel Name field is 6 cm wide – only award this mark only if the screenshot shows the width change (1) Do not penalise for spelling errors in the title	1
b	Data entry via form: <table><tr><td>Hotel ID</td><td>H201</td></tr><tr><td>Hotel Name</td><td>Keltischer Berg</td></tr><tr><td>Resort</td><td>Innsbruck</td></tr><tr><td>Ski Pass</td><td>Yes</td></tr><tr><td>Price Range</td><td>Medium</td></tr></table> Award 2 marks for 5 correct entries Award 1 mark for 3 or 4 correct entries Award no marks for 0, 1 or 2 correct entries Ignore spelling of Hotel Name and Resort	2

	A2 c	Query:		

Length of stay	Hotel ID	Price Range	Hotel Name	Resort	Ski Pass
Bookings	Hotels	Hotels	Hotels	Hotels	Hotels
☐	☑	☑	☑	☐	☐
=14				="Obergurgl"	Yes

Correct criteria: Obergurgl, 14 nights, Ski Pass

1 & 2. Award 2 marks for all 3 correct criteria
        Award 1 mark for 2 correct criteria
        Award no marks for 0 or 1 correct criteria

2

Result of Query:

Hotel ID ↴	Price Range ▾	Hotel Name
H118	High	Herrenhaus
H103	Low	Alpen Haus

3. Correct fields only in any order – **Hotel ID**, **Price Range** and **Hotel Name** (1)

1

4. Fields displayed in the correct order (as shown) (1)

1

5. Hotel ID - sorted in descending order (1)

1

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d Query:

Field:	Email	First Name	Date of Birth
Table:	GUEST	GUEST	GUEST
Sort:			
Show:	☑	☑	☑
Criteria:			Like "**/**1990"
or:			

Results of query:

Email	First Name	Date of Birth
ziggy@talk.org	Ziggy	04/02/1990
norman@fortran.net	Norman	16/05/1990
johann@chat.com	Johann	03/10/1990
robertsd@talk.org	Delphine	31/10/1990
owenl@virgin.net	Laia	14/12/1990
lunayang@chat.com	Luna	29/12/1990

1. Logo from Task A1a positioned top right (1)

1

2. Includes a suitable title - reference to 1990 (1)

1

3. Shows **Email**, **First Name** and **Date of Birth** in that order (1)

1

4. Displays the correct **6** records (1)

1

5. Sorted in ascending order of Date of Birth – Ziggy down to Luna (1)

1

6. No truncation (1)

1

A2 e (i)	*Identify the type of relationship that will be needed between the **HOTEL** table and the **BOOKING** table.* One to many. Accept alternative notations e.g. 1:M, 1:N	1
e (ii)	*Explain **one** reason why referential integrity should be enforced for relationships in a database.* It is a form of data validation (1) so it makes sure that invalid data cannot be entered into any two of the tables (1) System of rules that ensure database data is valid (1) so that you cannot accidentally delete a record in one table if it exists in a related table (1) You cannot accidently delete a record (1) because it is a foreign key in another table (1) Invalid data cannot be entered (1) because the foreign key must exist as a primary key first (1)	2
e (iii)	*State the name of the table that would have its data entered last.* BOOKING	1
e (iv)	*Explain **one** reason why **Like "*haus*"** would be used in a database search* To return any occurrence of hotels with haus in their name (1) because without it there would be no hotel with just the name haus (1)	2
	Total for Task A2	**24**

A3	Web authoring	
a (i)	**Ignore all spelling and case** The home page design: The home page: 1. <h1> (Company Name – allow TSR) **and** <h2> (Page Title – accept any appropriate page title) – h1 **and** h2 must be included on the correct sections – company name and page title (1) 2. <u> used on Page Title (1) 3. Background - Blue Gray (#98AFC7) **and** Introductory Text - White (#FFFFFF) – allow the background mark if the background for the boxes in the design use the correct colour (1) 4. Links appear on the left of the page **and** appropriate text is in the centre **and** images (any number of images) are on the right of the page (1) 5. All images are the correct size (200px x 200px) (1) 6. Images are vertically aligned (1) 7. Links appear one above the other (1) 8. One image links to http://www.theskirun.net (1) 9. Email link - mailto: sam@tsr.net (1) 10. Home page consistent with the design structure – ignore the text in the footer (1)	1 1 1 1 1 1 1 1 1 1

A3 a (ii)	Page title – Reference to Lessons (1)	
	1. HTML table included (do not award marks for a table created in word):	1

Time	Area to meet	Instructors
09.00 – 11.00	Green area	Johann, Kris, Melody
11.15 – 13.15	Blue area	Charlotte, Bruno, Maria
13.30 – 16.00	Red area	Heidi, Soloman, Ceillan

	2. Appropriate use of table elements – award the mark if an appropriate table has been created in HTML (1)	1
	3. Border set to any appropriate px size (1)	1
	4. Table content - relevant information included in the table taken from the WEBSITE document (1)	1
a (iii)	HTML shows functioning link from **Home page** to **Ski Lessons** page **OR** functioning link from **Ski Lessons** page to **Home page** xxxxxx	1
b	HTML changes: 1. Any text element colour changed to – Indigo (#4B0082) (1)	1
	2. Right align the contact details (email address) (1)	1
	Award these marks if the candidate has presented the final web page with the changes showing. Accept the change of text colour if it shows blue. Do not award the right align mark for anything other than the footer section.	
c (i)	<img src=slalom.jpg alt="Image of skier"> *State* **one** *reason why the code will not display the image* There are no " " around the image – the image will not display <img src="slalom.jpg" alt="Image of skier">	1

A3 c (ii)	Explain **one** reason why alt text has been used on the image	2
	If the image does not display (1) then users would still know what the image is (1)	
	Some people are visually impaired (1) which means they will still know what the image is (1)	
	Some people have limited bandwidth (1) so they would not be able to download the image data (1)	
	Images provide context to the information presented (1) which makes it clear to users what is being shown (1)	
	Images are often used to provide information that is not included in the main text (1) so users can see still be provided with the full information (1)	
c (iii)	Give **one** advantage of using a template when setting up web pages	1
	To ensure consistency between pages Saves time (accept quicker) Easily follows house style The developer can concentrate on the content / does not have to think about the placement and style	
	Total for Task A3	**21**

Task	Answer	Marks
	Section B	
B1	**Spreadsheets**	
a (i)	New row inserted at the top of the spreadsheet and include the heading 'Ski Information 2021'	1
a (ii)	Row 1 merged and centred (A1:E1)	1
a (iii)	Heading formatted: • serif • bold • larger size font than the rest of the text	1
a (iv)	Header: Completed: date of exam (from 26/04/2021)	1
a (v)	New row inserted with reduced height (as row 2) Award the mark if any noticeable reduction has been made to the height Only award the mark if row labels or gridlines are shown	1

B1 b (i)	**Cost of Equipment Hire** 1. Use of correct function (=VLOOKUP **or** =LOOKUP) for Equipment Hire	1
	2. Use of correct lookup value (B4) for Equipment Hire	1
	3. Use of correct table array (Details!A$14:B$16) / lookup vector (Details!A$14:A$16)	1
	4. Use of correct column index number (2) **OR** use of correct results vector (Details!B$14:B$16)	1
	Examples: =VLOOKUP(B4,Details!A$14:B$16,2,0) **OR** =VLOOKUP(B4,Details!A$14:B$16,2) =LOOKUP(B4,Details!A$14:A$16,Details!B$14:B$16) Accept without use of absolute referencing Allow named ranges and allow absence of final argument in VLOOKUP (,0)	
b (ii)	**Cost of the Ski Pass that includes a 20% discount if the cost of the equipment hire is more than 300€** =If(C4>300,	1
	Details!B$18-Details!B$18*20%, **OR** Details!B$18*80%,	1
	Details!B$18)	1
	Accept without use of absolute referencing	
b (iii)	**Total cost of the Equipment Hire and the Ski Pass** =C4+D4 Allow =SUM(C4:D4)	1

b (iv)	Replicate functions **and** formulae for **all** other members using absolute cell referencing:
	   • Equipment Hire
	   • Ski Pass
	   • Total Cost (absolute referencing not required)
		1

b (v)	**Total cost of Equipment Hire** =SUM(C4:C18) Allow the function to appear in any cell	1

B1 c	*Spreadsheet formatting:*	
	1. Currency showing € with no decimal places	1
	2. Headings wrapped to use space efficiently – allow for one heading	1
	3. All data visible – cell contents, column labels (no truncation)	1
	4. Row and column headings and page header displayed	1

d (i)	**DETAILS worksheet**: **Percentage length of each ski run type** =B5*100/B2 =B5*100/B$2 Accept B5/B2 then the use of percentage format	1
d (ii)	**Average length of all the ski runs** =AVERAGE(B5:B7)	1
	Total for task B1	**21**

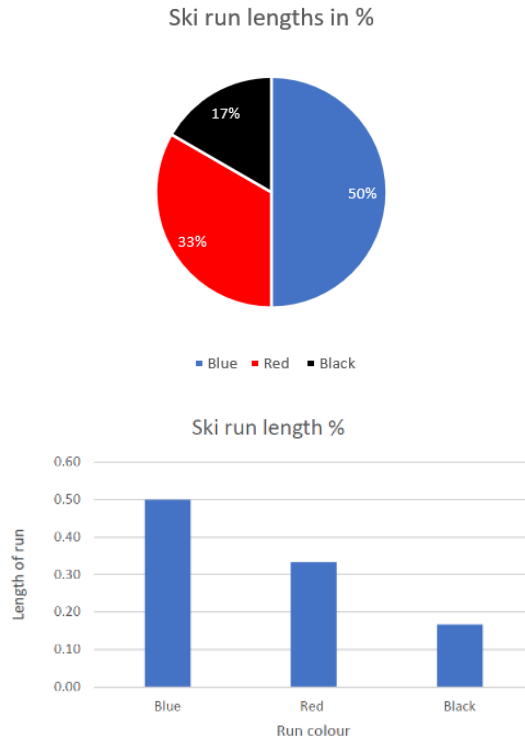| B2	Filtered to show only **Level 3** members	1
	Displaying only the **Member Name** and **Total Cost**	1
	Do not penalise if there is data at the bottom of the of the spreadsheet	
	Total for Task B2	**2**

B3 a	Suitable (pie) chart that includes the percentage of the ski run length	
	1. Has a suitable title (e.g. Reference to Ski Run Length) (1)	1
	2. Includes suitable labels showing the values (50, 33, 17) (1)	1
	3. Includes % (1)	1
	The % symbol must either be in the title **or** on the segments The bar chart was awarded 2 marks: Suitable title refers to ski run length (1) Suitable labels showing values – bars should have included the exact values so this mark is not awarded (0) The title includes the % (1)	
b	Display **Member Name**, **Member Type** and **Ski Pass cost** (A, B and D only) Do not penalise if there is additional information at the bottom of the spreadsheet.	1

B3
c (i)
	
	=COUNTIF(B3:B14,B7) has been used in cell B15
	For the description, award **one** mark for any 3 of:
	
	    1. It looks in the range of cells B3 to B14
	
	    2. It compares the value of the cells to match the content of cell B7 (which is 4 star rating)
	
	    3. It returns a value of 3
	OR
	    1. It compares the values in the range B3:B14
	
	    2. With the value in B7
	
	    3. And returns the number of matches
	
	Must refer to given example rather just generic comments
		1
		
		1
		
		1

c (ii)	 *State the feature labelled A* Named range	1
	Total for Task B3	**8**

B4 a	1. Heading (Welcome to the Ski Run) **and** sub-heading (Ski lessons offered:) formatted appropriately	1
	2. Use of bullets/sub bullets to match instructions	1

Welcome to The Ski Run

Ski lessons offered:
- private
  - must be pre-booked
  - requires a 10% deposit

- group
  - beginners
  - intermediate
  - advanced

	3. Appropriate number of columns and rows (1)	1
	4. Any evidence of merging cells (1)	1
	5. Cells merged follow the design (1) • Sam's Ski School • Private Ski Lessons • Group Ski Lessons • Blank section	1
	6. Sam's Ski School heading – centred horizontally **and** vertically (1)	1
	7. Other alignment (1) • Private Ski Lessons **and** Group Ski Lessons – left aligned • Dates appear to the right of the rows	1
	8. Text colour – appropriate use of colour contrast on the content of the cells (1)	1
	9. Sam's Ski School – size 28 **and** serif font (1)	1
	10. Appropriate use of shading that follows the design (1)	1
	11. Content – time **and** money cells (1) • Sans-serif font • Smaller font size than headings • Euro symbol	1
	12. The table follows the provided design (1)	1
	13. The fact sheet is fit for purpose (1)	1

B4 b (i)	Explain **one** improvement you would make to the table. Changing colours of the background and text (1) so that the text is clearer to read (1) Different use of font styles, sizes, enhancements (1) so that the text stands out more when reading (1) Size of table due to font size choices (1) so the information is clearly displayed (1) Learners will provide their own improvements with an appropriate expansion	2
b (ii)	Explain **one** reason why 'Save As' is used rather than 'Save' when saving a file. Save as allows you to change the filename (1) so that you can save a file with something other than the default name provided (1) Save as allows you to change the file destination (1) so that you can save a file anywhere other than the default destination (1) Save as allows you to change the file format (1) so that you can save a file in any format other than the default format (1) Save as allows for version control (1) so you can go back to earlier versions (1)	2
b (iii)	Spelling and grammar tools have been used to check some text. Explain **one** reason why proofreading is still required. The software may be set to a different country (1) so although the word is spelt correctly in that language, the software thinks it is an error (1) The word used may be a name (1) which as there are so many different names it is impossible for the software to recognise it (1) The word may be so badly spelt (1) which means the software has no idea of what the word should be so won't recognise it (1) The word may be a homonym/spelt correctly (1) but not in the right context (1)	2
	Total for Task B4	**19**