

Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/22

Paper 2 Practical Test A

May/June 2020

MARK SCHEME
Maximum Mark: 80

Published

Students did not sit exam papers in the June 2020 series due to the Covid-19 global pandemic.

This mark scheme is published to support teachers and students and should be read together with the question paper. It shows the requirements of the exam. The answer column of the mark scheme shows the proposed basis on which Examiners would award marks for this exam. Where appropriate, this column also provides the most likely acceptable alternative responses expected from students. Examiners usually review the mark scheme after they have seen student responses and update the mark scheme if appropriate. In the June series, Examiners were unable to consider the acceptability of alternative responses, as there were no student responses to consider.

Mark schemes should usually be read together with the Principal Examiner Report for Teachers. However, because students did not sit exam papers, there is no Principal Examiner Report for Teachers for the June 2020 series.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the June 2020 series for most Cambridge IGCSE™ and Cambridge International A & AS Level components, and some Cambridge O Level components.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit
 is given for valid answers which go beyond the scope of the syllabus and mark scheme,
 referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these
 features are specifically assessed by the question as indicated by the mark scheme. The
 meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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Guide To Bikepacking

Produced by: Candidate Name at is rapidly growing in popularity. It combines mountain biking with I Bikepacking is a new genre of tdoors, recon BP-Title modified style EV4 1 mark Subtitle entered accurately with name 1 mark serif 34pt, centre, bold, italic, single line, 0 before 0pt after a more chall BP-Subtitle listed in EV3 and applied sans-serif, 20pt, italic, dventurous thright aligned, 0 pt space after, no additional formatting 1 mark ie greatest triirigs about triis ionin o straints being daylight and fatigue. with the only Subheadings (5) BP-Subhead listed in EV3 and applied 1 mark of the test and part of the Racing serif, 18pt, centre, bold, underline, 0 before 9pt after ur framebag for are: Columns Popular Distance Bikepacking Races а Section break in correct position 1 mark Event KMNotes Region All text changed to 2 columns, 2 cm column spacing 1 mark Fixed route - Pacific Trans Am Bike Race USA6900 coast, Oregon to prohibited Atlantic Coast, Virginia extrem Fixed route - shore of **Table** afford Indian Pacific Wheel Race Australia Indian Ocean, Perth to Column with heading Time Limit deleted 1 mark challe Pacific Ocean, Sydney Sorted descending order of KM 1 mark and h Fixed route - Canada to New row inserted as first row of table 1 mark Mexican border. Tour Divide Canada-USA 4400 Title entered 100% accurately in first row traversing length of 1 mark comr Rocky Mountains Top row merged, centred 1 mark perso Race Across South Heading bold 1 mark cover Africa, east to west, Data centre aligned vertically, no words split on wrap 1 mark clock Freedom Challenge Must be navigated by Africa 2300 All internal and external gridlines printed, border Draft map and compass. GPS and all data within column width and r 1 mark devices not allowed High altitude cycling in and BP-Table listed in EV3 and applied 1 mark Andes mountains, availa serif, 10pt, centre, italic, single line spacing, 0 before and Inca Divide Peru1800 challenging weather bookii after, no cell shading conditions racers strategic e monitored using GPS satellite-based refuelling Automated page numbers left aligned ed to the bikes and upload the position Name, centre number, candidate number right aligned, no other placeholders followers to view. Official reports and 1 mark

Name, centre number, candidate number

© UCLES 2020 Page 3 of 16

videos are posted online and some competitors post updates on social media. Many participants do not enter a bikepacking race to win, but merely to challenge themselves and to take bike touring to a more intense level. Conventional cycle touring uses racks and panniers to carry equipment. This adds considerable weight to the bike, making it difficult to push and uncomfortable ride on off-road.

Bikepacking uses a new light



Race Rules

All races follow a general set of guidelines that are de to make the racing fair for all participants. Events may hav own specific rules but the standard guidelines that apply to al are:

- full course must be completed from start to finish
- no outside support permitted
- all forward travel over land must be human powered
- pre-booking accommodation or food/supply caching on the trail is not allowed
- ✓ drafting is prohibited
- riders must carry a GPS tracker
- riders must have insurance and wear a helmet
- front and rear lights are mandatory
- riders must wear high visibility clothing and gear at night
- ✓ riders must know, respect and observe local laws.

Bikepacking should have minimal impact on the landscape and people living in it. The 'Leave No Trace' ethics offer a sound common sense approach to preserving the natural beauty of the land which should look untouched and be left as it was found.

Equipment

Almost every mainstream bike manufacturer now at least one 'adventure bike' or 'bikepacking rig'. A typical e setup consists of a lightweight mountain bike with an efficient, ultralight gear kit for carrying minimal supplies. Advances in technology have made ultra-light camping equipment such as titanium stoves more affordable. The kit is packed or strapped onto the bike so it is balanced and secure.

Page break Page break removed above Equipment information needed to route, navigate whilst ric can be found online, sw back-up compass and reflectionics fail. Prepare

Image

Bullets

Applied to correct data

Tick ✓ shaped bullets applied

Image inserted in correct paragraph 1 mark
Rotated 180° so wheels at bottom 1 mark
Resized to 4 cm wide with aspect ratio maintained 1 mark
Aligned to top of text and right margin, text wrapped 1 mark

main load carriers and frame pack. at the front of the vy. The seatpack er items in the pically, a full set of acity of around 32

litres.

Limited space encourages a lightweight approach which

1 mark

1 mark

of a bike. A lighter bike less of a chore and the ss wear and tear on be less fatigued. In turn le to ride, whatever the

Bullets indented 1.5 cm from left margin, Hanging indent, single line, 0pt space between 1 mark

Navigation

Bikepacking lends itself particularly well to touring with a handlebar-mounted GPS device loaded with pre-planned routes. Singletrack trails are often unmarked or easily missed and a GPS mapping device will provide directional guidance negating the need to stop and consult a map at every junction. Alternatively, a

ou have the means to keep it opular way of saving and e files contain all the route

information needed to stay on track and enable riders to plan a route, navigate whilst riding and review how well a trip went. They can be found online, swapped on forums, or created and shared. A back-up compass and map are always recommended in case the electronics fail. Preparation is key. As you become more

1 mark

2

Name, centre number, candidate number

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adventurous you will be exploring further away from support and help.

Camping

It is often illegal to camp in the wild without the landowner's permission. Many landowners and farmers will be happy to allow camping if they are asked, but access laws must always be respected.

BP-Body matches style seen in EV2 sans-serif, 11pt, justified with first line indent at 1.5 cm, single line, 0 before, 6pt after

Doc complete/paras intact, A4, landscape, margins 2 cm, no large gaps, columns aligned at top, no widows/orphans, table and list not split, no blank pages, 6pt after bullets and table

1 mark

1 mark

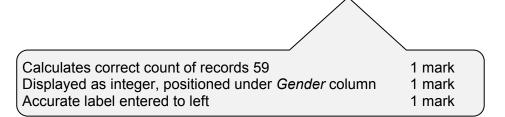
First_Name Karol Amanda	Last_Name Bonin Vander	Club_Name Hybrid Spinners	Category Veteran Veteran	Gender Male Female	Event_Rank 1 1
Stacy Nolar	ect, 100% accurate	e, as title, larger font, ful	ly visible, top of pa	age, no other tex	t 1 mark
Charlene	Mannsberger	Pedal Blazers	Veteran	Female	3
Sandra	Bunnin	Tachyon Flyers	Veteran	Female	4
Rich	Bolivar	Mountain Spinners	Veteran	Male	4
∕lichelle	Litke	Alliance Cycles	Veteran	Female	5
aron	Rushton	Easy Riders	Veteran	Male	5
Carl	Garcia	Pedal Blazers	Super Veteran	Male	1
shley	Bourgue	GoBike Rollers	Super Veteran	Female	1
iabby	Brazeau	Tawara Falcons	Super Veteran	Female	2
rett	Cruickshank	Alliance Cycles	Super Veteran	Male	2
effrey	Ellis	GoBike Rollers	Super Veteran	Male	3
hawna	Cabush	Ragwheel Racers	Super Veteran	Female	3
tephen	Weir	Alliance Cycles	Super Veteran	Male	4
rystal	Bristow	Tubular Belles	Super Veteran	Female	4
im	Maclean	Tawara Falcons	Super Veteran	Female	5
eter	Husband	Crankmeister Racers	Super Veteran	Male	5
hristian	Ramanow	Saddle Rollers	Senior	Male	1
aitlin	Mackenzie	Imperial Land Cruisers	Senior	Female	1
aura	Maclauchlan	Imperial Land Cruisers	Senior	Female	2
obert	Penner	Ragwheel Racers	Senior	Male	2
arcy	Jones	Cyclops Flyers	Senior	Male	3
essica	Bourdeau	Tachyon Flyers	Senior	Female	3
enn	Brezsnyak	Gorilla Cycling	Senior	Female	4
iels	Lawrence	Ragwheel Racers	Senior	Male	4
uzana	Gomes	Cycle Bunnies	Senior	Female	5
rant	Sinclair	Tachyon Flyers	Senior	Male	5
hn	Schooler	Mud and Mucksters	Master	Male	1
amantha	Brophy	Chain Breakers	Master	Female	1
larina	Burnside	Crankmeister Racers	Master	Female	2
ick	Turcott	Crankmeister Racers	Master	Male	2
enny	Bowe	Chain Breakers	Master	Female	3
am	Boddy	Ragwheel Racers	Master	Male	3
arthy	Bratt	Tubular Belles	Master	Female	4
elect record vent_Rank i bility exclud	ds (59): is <=5 1	mark mark			
Specified fields, correct order Sort descending on Category then ascending on Event_Rank Portrait, one page wide, all base fields, no truncation Name, centre number, candidate number in footer – every page					

Name, Centre number, candidate number

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First_Name	Last_Name	Club_Name	Category	Gender	Event_Rank
Noah	Thomas	Tachyon Flyers	Master	Male	4
Jay	Lemiski	Chain Breakers	Master	Female	5
Betsy	Owen	Pedal Blazers	Junior	Female	1
Dominic	Kent	Tawara Falcons	Junior	Male	1
Michael	Hurford	Mountain Spinners	Junior	Male	2
Liann	Mueller	Imperial Land Cruisers	Junior	Female	2
Shauna	Macdonald	Chain Breakers	Junior	Female	3
Richard	Armstrong	Cyclops Flyers	Junior	Male	3
Robin	Belanger	Cycle Bunnies	Junior	Male	4
Nicole	Broadbent	Tubular Belles	Junior	Female	4
Aidan	Langford	Bike Ways	Junior	Male	5
Anna-Gabrielle	Partington	Ragwheel Racers	Junior	Female	5
Denise	Magsamen	Mountain Spinners	Grand Veteran	Female	1
Cody	Pennington	Saddle Rollers	Grand Veteran	Male	1
Erin	Marley	Tubular Belles	Grand Veteran	Female	2
David	Caskey	Camel Hybrid Spinners	Grand Veteran	Male	2
Bradley	Adomonis	Camel Hybrid Spinners	Grand Veteran	Male	3
Chantell	Leishman	Cyclops Flyers	Grand Veteran	Female	3
Kristin	Buchanan	Sprocket Rockets	Grand Veteran	Female	4
Phil	Kourline	Mountain Spinners	Grand Veteran	Male	4
Lars	Wiebe	Sprocket Rockets	Grand Veteran	Male	5
Leigh	Micklethwaite	Bike Ways	Grand Veteran	Female	5

Number of racers



59

Name, Centre number, candidate number

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Speed Penalties Applied

Calculated field

Heading 100% accurate 1 mark [Avg_MPH]*0.95 calculated, correct values 1 mark

Displayed to 2 dp

1 mark

number									
First_Name	Last_Name	Club_Name	Locati		Category	Event_Rank	Penalty	Avg_MPH	Revised_MPH
L Title	Correct, 100%	accurate, as title, fully v	visible, no other text	1 m	ark	19	Yes	15.55	14.77
D	Serif, 30pt, blac			1 m		33	Yes	15.33	14.56
d						54	Yes	14.88	14.14
Scott	Blixhavn	Crankmeister Racers	North East		Senior	80	Yes	14.32	13.60
Laura	Maclauchlan	New record Janet	Olsen, appears once,		Senior	2	Yes	13.95	13.25
Janet	Olsen	record Su Mullen		1 mark	Senior	6	Yes	13.67	12.99
Su	Mullen	T New record entere		1 mark	Senior	11	Yes	13.40	12.73
Nicole	Cahill	Tub ular Belles	East iviiuianus		Senior	13	Yes	13.18	12.52
Jack	Glendinning	Sprocket Rockets	Central and Eastern S	Scotland	Senior	163	Yes	12.79	12.15
Tanya	Lohmann	Tubular Belles	East Midlands		Senior	20	Yes	12.67	12.04
Linda	Burton	Sprocket Rockets	Central and Eastern S	Scotland	Senior	25	Yes	12.54	11.91
Christina	Tomkinson	Tubular Belles	East Midlands		Senior	26	Yes	12.42	11.80
Kirk	Fraser	Crankmeister Racers	North East		Senior	198	Yes	12.11	11.50
Spencer	Sarnecki	Sprocket Rockets	Central and Eastern S	Scotland	Senior	217	Yes	11.58	11.00
Sian	Chilvers	Crankmeister Racers	North East		Senior	37	Yes	11.45	10.88
Julia	Chamberlain	Tubular Belles	East Midlands		Senior	53	Yes	10.51	9.98
Emmanuelle	Mercer	Crankmeister Racers	North East		Senior	60	Yes	10.09	9.59
Clementine	Niles	Sprocket Rockets	Central and Eastern S	Scotland	Senior	66	Yes	9.85	9.36
Erin	Whitehouse	Tubular Belles	East Midlands		Senior	68	Yes	9.82	9.33
Alex	Nicholson	Crankmeister Racers	North East		Senior	76	Yes	9.23	8.77
Select rec	ords (20):								

Select records (20):

Location contains East 1 mark Category is Senior, Penalty is Yes 1 mark

Specified fields, correct order 1 mark Sort descending on Avg_MPH 1 mark Landscape, fits one page, all base fields present, no truncation 1 mark Eveny_Rank integer, Penalty displays as Yes/No; Avg_MPH as 2 dp 1 mark

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Task 4 - Mail merge

Name, centre number and candidate number

Tawara Bike Adventures

Merge Fields inserted - <text> replaced - correct position and spacing, punctuation maintained

«Title» | «Last_Name» | «Street» | «Town» | «Postcode» |
«Tour_Name», | «Region», | «Distance»

1 mark 1 mark

«People» | «Departure» | «Duration» | «Price PP»

1 mark

Date as Postmark

«Title» «Last_Name»

«Street»

«Town»

«Postcode»

Dear Customer

I am pleased to confirm your holiday booking with Tawara Bike Adventures. The price paid includes all accommodation costs, cooked breakfasts, packed lunches and all road transfers during the holiday. We limit each group to eight members with two guides, giving a 4-1 client to guide ratio. Travel insurance, personal equipment, evening meals and incidental expenditure such as bike spares and laundry are not included in the holiday price.

Your final payment is due six weeks before departure. Please thoroughly check the booking details below and make sure you have the correct insurance and equipment for your trip. If you have any queries at all, p

Yours sincerely

Master document printed, name replaces text,

Name, centre number, candidate number in the header 1 mark

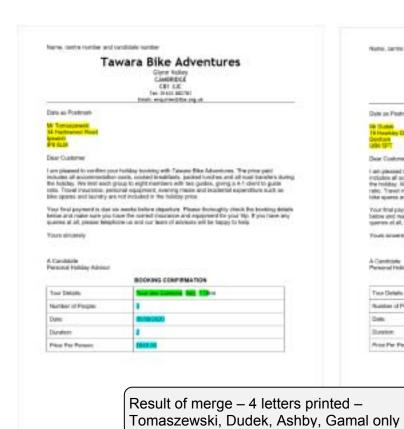
A Candidate

Personal Holiday Advisor

BOOKING CONFIRMATION

Tour Details:	«Tour_Name», «Region», «Distance»km	
Number of People:	«People»	
Date:	«Departure»	
Duration:	*Duration*	
Price Per Person:	«Price_PP»	

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Tawara Bike Adventures

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Task 6 - Presentation

06/01/2019

6 slides imported, title and bullet layout, no text changes, blank slides, or overlap of items, name inserted after Presented by:

1 mark

Master slide items same position and consistent on all slides

Name, centre no, candidate number

1 mark

Automated slide numbers bottom left aligned

1 mark

Race Across America (RAAM)

Presented by: Candidate Name

Slide 1 changed to Title layout with centred title/subtitle, no bullet 1 mark Background slide moved to become slide 2 1 mark

Name, partire number, condidese number

Background

- transatlantic ultra-marathon bike race running since 1982
- the world's longest endurance event and time trial
- often called "the world's toughest bicycle race"
- racers from at least 20 countries every year
- · about 18% of the racers are women
- · 30% longer than Tour de France in half the time
- · no rest days

1

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21/09/2019

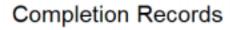
Name, contro mumbro, cambidate mumber

Organisation

- location North America, United States of America
- start Oceanside Pier, California
- finish City Dock Annapolis, Maryland
- maximum duration solo racers 12 days, team racers 9 days
- ascent 51816 metres

Chart

Line chart created using correct data, year labels visible 1 mark Chart in correct position, left of bullets, all data fully visible, no overlap 1 mark Chart title Solo Average Speed Records 100% accurate 1 mark Value axis displays label Miles Per Hour 1 mark Y-axis displays minimum 6, maximum 22 1 mark Y-axis increments set at 4 1 mark Value data labels above each data point 1 mark Value data labels displayed to 2 decimal places 1 mark Legend displays Solo Female/Solo Male 1 mark All slides printed with 2 slides to page 1 mark





- winning competitors complete the course in just over a week
- fastest ever male racer average speed 16.42 mph in 7 days 15 hours
- fastest ever female racer average speed 13.22 mph in 9 days and 4 hours

2

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21/09/2019

Name are tracked position combin-

Entry

- · open to professional and amateur racers
- participants range in age from 13 to 75
- · solo, 2, 4, and 8-person relay teams
- · solo racers must qualify to compete

New year name period hards

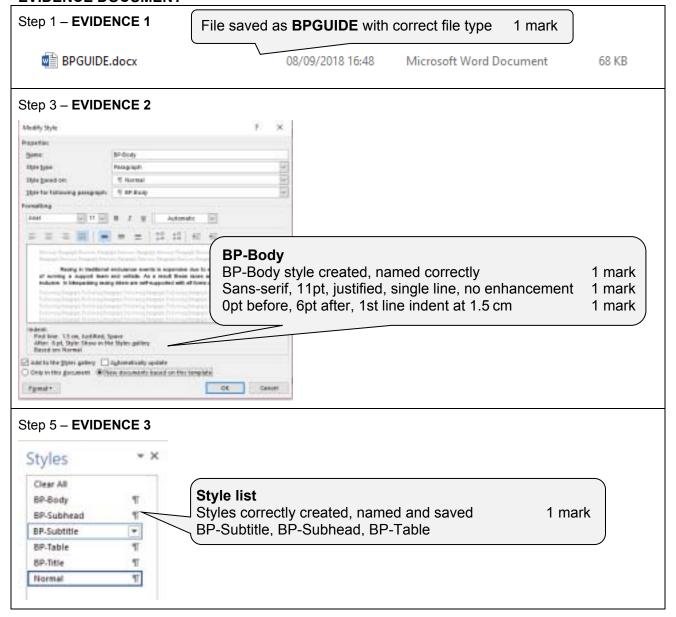
The Route

- · crosses 12 states from the west coast to the east coast
- traverses three major mountain ranges (Sierra, Rocky and Appalachian)
- crosses the Great Plains and four of America's longest rivers (Colorado, Mississippi, Missouri and Ohio)
- passes through iconic American landmarks (Mojave and Sonoran Deserts, Monument Valley, Great Plains and Gettysburg)

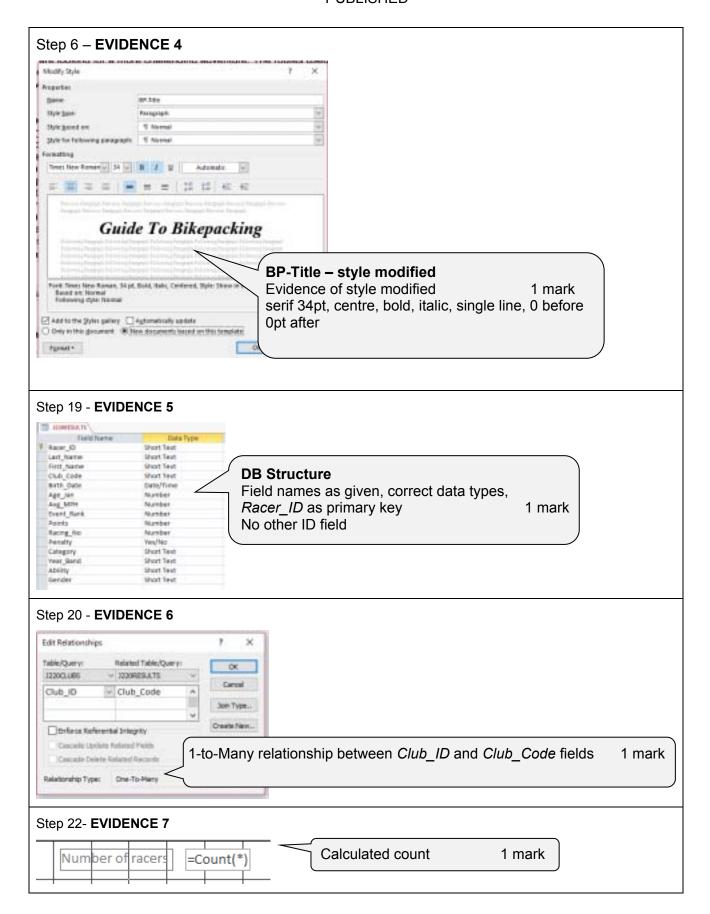
.

3

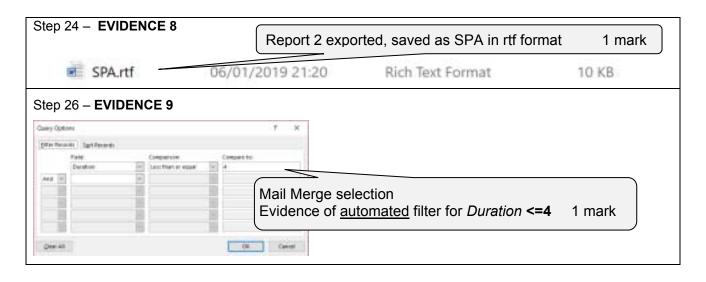
EVIDENCE DOCUMENT



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© UCLES 2020 Page 16 of 16