

Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/21

Paper 2 Practical Test A

May/June 2020

MARK SCHEME
Maximum Mark: 80

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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Name, centre number, candidate number left aligned, automated page numbers right aligned, no other placeholders

1 mark

Mountain Bike Study

Revised by: Candidate Name

Title entered accurately
MB-title listed in EV3 and applied
(sans-serif, 36pt, centred, bold only,
Opt space before/after)

1 mark 1 mark

Subtitle – Name entered
MB-subtitle style modified EV4 1 mark
correct attributes – sans-serif, 18pt, right, italic, single line,
0 before 0pt after

performance. They are typically ridden on m

rocks, loose dirt, muddy or grassy tracks, and steep stopes. Electric mountain bikes are batteryassisted bikes that are less exhausting for the riders. These bikes have broadened the appeal of mountain biking and attracted a wider age range to the sport.

Global Market Growth

Moun biking is a major sport that is witness increase in the number of participal competitive events worldwide market is expected to

Subheadings (5)

MB-subhead style applied matches style defined in EV2

1 mark

Columns

Section break in correct position 1 mark
All text changed to 2 columns, 1 cm column spacing
1 mark

1 mark acing 1 mark which bodes well for the sport.

America with surging sales of mountain bikes. Both areas have vast and scenic mountain ranges with Canada having some of the best mountain bike trails in the world. Asia Pacific is the fastest rising and most lucrative market due to the growing disposable incomes of people in the area, particularly in the nations of India, China, Australia, South Korea, Singapore and Taiwan.

Demographics

Most mountain bikers are aged between 20 and 40, with the average age being 26. The sport is dominated by young males with only 7% of participants being female. Most female

<u>Health Benefits</u>

Health issues such as obesity, heart disease and diabetes are on the rise and physical exercise, especially in the outdoors, is essential for health and well-being. Studies have found that people who cycle regularly have a life expectancy two years above average and enjoy a level of fitness equivalent to someone ten years younger. Mountain biking is an aerobic activity that gives the heart, blood vessels and lungs a thorough workout. It is a fun and exciting way to enjoy the many health benefits of regular exercise including:

Bullets

Applied to correct data 1 mark
Square shaped bullets applied 1 mark
Bullets indented 2 cm from left margin, hanging
indent, single line, 0pt space between 1 mark

or may be due to the demanding physical nature of the activity which is less attractive to older sports enthusiasts. These demographic

- increased cardiovascular fitness
- improved joint mobility, muscle strength and flexibility
- better posture and coordination
- strengthened bones
- reduced body fat levels
- lower blood pressure
- strengthened immune system
- reduced stress levels, anxiety and depression.

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2

Name, centre number, candidate number At any age there is no better way to improve overall physical, mental and emotional health.

One reason many people choose mountain biking as a hobby is the potential for it to become a lifelong adventure.

Competitive Racing

Competitive mountain biking is a relatively new sport which originates from America where the first national mountain bike competitions were held in 1983. The sport gained in popularity and the discipline grew

One reason many people choose mountain biking as a hobby is the potential for it to become a lifelong adventure. The youngest world championship winner w vst 16 years

Correct sentence copied to correct location, appears in both places

1 mark

Mountain Biking Tourism

Mountain bike tourism is booming worldwide and is the second highest grossing outdoor recreation category in America. The market has been driven by growing demand for active

> increased interest in 'green' continued global development structure. Bikers are attracted nd rugged landscapes and the explore and ride new trails. based in the same location with

Image

Image inserted in correct position Aligned to top of text and right margin, text wrapped Image cropped to remove sky (top 1/3) Resized to 3.5 cm wide

and e-m 2019.

daily mountain bike trails in the surrounding

Correct paragraph indented 1cm from left and right margins 1 mark Thick (3–4pt) border applied to indented text 1 mark

1 mark

1 mark

1 mark

1 mark



into different categories and level of skill so the competition is balanced between riders

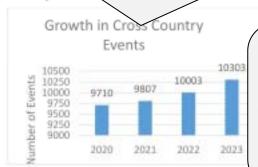
comparable age, skill and experience. In multilap courses the number of laps to be completed will depend on the type of race and rider ability category. Some races are time trials

Research has shown that mountain bikers take two mountain bike holidays each year and tend to stay longer and spend more per day than other tourists. On average they will ride for 4 hours 45 minutes each day and cover 55.5

Vertical bar chart created using correct data, year labels present 1 mark erate Chart in correct place, within margins, all data fully visible, no overlap 1 mark act as Chart title: Growth in Cross Country Events 1 mark An Y-axis displays label: Number of Events 1 mark lives Y-axis displays minimum 9000, maximum 10500 1 mark Y-axis displays increments set at 250 1 mark ul in trail Value data labels displayed above each bar, no legend or x-axis label 1 mark gling vears

country events

re-open the trail. It is now a 12km adventure mountain bike trail with a downhill descent of



MB-Body style seen in EV3 and applied serif, 12pt, justified, single line, 0 before, 6pt after 1 mark Doc complete/paras intact, A4, portrait, margins 2 cm, spacing consistent, columns aligned at top, no widows/orphans, no overlap in chart, chart, list & bordered paragraph not split, no blank pages, 6pt after bullets

1 mark

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Jill

Katy

Title

Title 100% accurate, top of page, no other text

1 mark

Top Ability Females

Top Abili	Name, centre number, candidate number					
First_Name	Last_Name	Gender	Club	Licence	Points	Ability
Daena	Perry	Female	Procycles Racing	Yes	150	Elite
Danielle	Gibson	Female	,		125	Elite
Madeleine	Chamberlain	Female	Kernow Pedallers	Yes	125	Expert
Emily	Glendinning	Female	Tawara Bike Buddies	Yes	110	Expert
Clementine	Cunningham	Female	Redbike Rollers	Yes	110	Elite
Linda	De Boon	Female	Trail Blazers	Yes	100	Expert
Nicole	Ecerova	Female	Velocity Bikers	Yes	100	Elite
Julia	Jackson	Female	Camel Cycling	Yes	90	Expert
Sian	Maclean	Female	Kernow Pedallers	Yes	90	Elite
Jane	Hagedorn	Female	Mountain Kings	Yes	80	Expert
Susan	Caskey	Female	Vortex Spoke	Yes	80	Elite
Zuzana	Gunawardena	Female	Procycles Racing	Yes	70	Elite
Safiya	Gamal	Female	Flying Cyclops	Yes	65	Elite
Genevieve	Michalski	Female	Kernow Pedallers	Yes	65	Expert
Jenny	Bourgue	Female	Endurance Cycles	Yes	60	Expert
Alana	Aardal	Female	Camel Cycling	Yes	60	Elite
Jennifer	Sinclair	Female	Hardcore Cycling	Yes	55	Elite
Ruby	Harris	Female	Camel Cycling	Yes	55	Expert
Laura	Widney	Female	Procycles Racing	Yes	50	Elite
Elizabeth	Turcott	Female	Kernow Pedallers	Yes	50	Expert
Jenaya	Keenlisde	Female	Trail Blazers	Yes	44	Expert
Meghan	Sullivan	Female	Tawara Bike Buddies	Yes	44	Elite
Emmanuelle	Leonardson	Female	Cyclemeisters	Yes	41	Elite
Patricia	Roberts	Female	Flying Cyclops	Yes	38	Elite
Christina	Callaghan	Female	Mountain Kings	Yes	38	Expert
Alex	Liu	Female	Kernow Pedallers	Yes	36	Elite
Su	Wai Wai Hnin	Female	Mud and Gears	Yes	36	Expert
Nadine	Turner	Female	Vortex Spoke	Yes	34	Expert
Janet	McConnachie	Female	Hardcore Cycling	Yes	30	Expert

Camel Cycling

Mud and Gears

Specified fields, correct order	1 mark
Sort descending order of <i>Points</i>	1 mark
Portrait, all field present, fits a single page, no truncation	1 mark

Yes

Yes

28

26

Expert

Expert

Select records (31):

Ability is Elite or Expert 1 mark

Gender is Female, Licence is Yes 1 mark

Female

Female

Hurford

Walters

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0417/21			(e IGCSE – Mark Scheme			May/June 2020		
Bike	CTUY Title	in a black, 28 point	serif fon		mark ark	Calculated field Heading 100% a Calculated - corr	ccurate ect values		Lan Time	
Last_Name Sheen	First_Name		rge_Jan 70	Category	Tawar Buddies	Displays as inted		1 mark	ap_Time	
	Marg	Female		Super Veteran		8	Yes	01:28:15		
Popovic	Ramona	Female	67	Super Veteran	Allers	8 4	Yes	01:25:16	28	
Kulak	Alexandria	Female	63	Super Veteran	<u>/</u> ollers	4	Yes	01:20:42	27	
Young	Amanda	Female	57	Specified fields, of			1 mark	01:20:00	27	
Hitchcock	Marin	Female	54		Gender then descending		1 mark	01:17:25	26	
Woodward	Kristin	Female	52		page wide. all base field		1 mark	01:18:29	26	
Green	Holly	Female	42	Veteran	Bike Runners	14	Yes	01:28:59	30	
New record Britton	n Jamie. 61. app	ears once.	41	Veteran	Tawara Bike Buddies	10	Yes	01:20:09	27	
record Brophy Rya			40	Veteran	Tawara Bike Buddies	15	Yes	01:33:54	31	
New record entere	ed accurately	1 mark	72	Super Veteran	Tawara Bike Buddies	16	Yes	01:22:40	21	
OIIC	Austin	Iviale	67	Super Veteran	Velocity Bikers	4	Yes	01:14:26	19	
Mcrae	Peter	Male	65	Super Veteran	Redbike Rollers	12	Yes	01:18:23	20	
Brophy	Ryan	Male	62	Super Veteran	Tawara Bike Buddies	1	Yes	01:11:19	18	
Britton	Jamie	Male	<mark>61</mark>	Super Veteran	Bike Runners	5	Yes	01:15:26	19	
Lockerbie	Jeffrey	Male	60	Super Veteran	Velocity Bikers	8	Yes	01:17:10	19	
Myslicki	Reid	Male	59	Grand Veteran	Redbike Rollers	7	Yes	01:15:50	19	
Honeyford	Adam	Male	59	Grand Veteran	Tawara Bike Buddies	27	Yes	01:24:55	21	
Gordon	Lukas	Male	58	Grand Veteran	Velocity Bikers	42	Yes	01:32:43	23	
Marshall	Logan	Male	57	Grand Veteran	Tawara Bike Buddies	8	Yes	01:16:18	19	
Forrest	Mike	Male	55	Grand Veteran	Redbike Rollers	17	Yes	01:20:02	20	
Bratt	Jayar	Male	55	Grand Veteran	Redbike Rollers	9	Yes	01:16:22	19	
Whitehouse	Oleksa	Male	54	Grand Veteran	Tawara Bike Buddies	36	Yes	01:27:48	22	
Brezsnyak	Jason	Male	52	Grand Veteran	Bike Runners	15	Yes	01:19:30	20	
Jaeger	Isaac	Male	51	Grand Veteran	Velocity Bikers	30	Yes	01:26:11	22	
Milward	Daniel	Male	50	Grand Veteran	Tawara Bike Buddies	12	Yes	01:18:26	20	

Select records (41):

Club contains **Bike**1 mark

Age Jan is >=40, Event Rank does not include **DNF**1 mark

Name, centre number, candidate number

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Cambridge IGCSE – Mark Scheme PUBLISHED

Last_Name	First_Name	Gender	Age_Jan	Category	Club	Event_Rank	Licence	Race_Time	Lap_Time
Klein	Robert	Male	50	Grand Veteran	Velocity Bikers	6	Yes	01:14:50	25
Gooding	Denis	Male	49	Veteran	Bike Runners	43	Yes	01:24:12	21
Brassington	Vic	Male	48	Veteran	Velocity Bikers	6	Yes	01:11:55	18
Daniel	Chris	Male	48	Veteran	Velocity Bikers	37	Yes	01:22:23	21
Chilvers	Ryan	Male	47	Veteran	Tawara Bike Buddies	16	Yes	01:16:01	19
Naylor	Justin	Male	46	Veteran	Velocity Bikers	26	Yes	01:18:34	20
Platten	Trevor	Male	46	Veteran	Velocity Bikers	13	Yes	01:14:26	19
Stevens	lan	Male	45	Veteran	Redbike Rollers	12	Yes	01:14:05	19
Malcolm	Daniel	Male	45	Veteran	Bike Runners	19	Yes	01:16:37	19
McGrath	Jean-Michel	Male	43	Veteran	Tawara Bike Buddies	17	Yes	01:16:12	19
Blackett	Nolan	Male	42	Veteran	Bike Runners	14	Yes	01:15:47	19
Watson	Ryan	Male	42	Veteran	Velocity Bikers	31	Yes	01:19:26	20
Cahill	Felix	Male	41	Veteran	Tawara Bike Buddies	22	Yes	01:18:01	20
Hughes	Mike	Male	40	Veteran	Bike Runners	47	Yes	01:25:39	21
Quinney	Tanner	Male	40	Veteran	Redbike Rollers	56	Yes	01:31:30	23
Walsh	Karol	Male	40	Veteran	Velocity Bikers	5	Yes	01:11:46	18

Average Age of Veterans

Calculates correct average age 52 1 mark

52

Displayed as integer, positioned under *Age_Jan* column Accurate label entered to left

1 mark
1 mark
Name, Centre number, candidate number displays in report footer, on every page

Formatting

Race Time displays hh:mm:ss, Licence as Yes/No 1 mark

1 mark

Name, centre number, candidate number

1 mark

Task 4 - Mail Merge

Glynn Valley Cycling Academy

Coburg Arena CAMBRIDGE CB1 3JC

Tel: 01632 882781 Email: enquiries@mtbracing.org.uk

20 September 2019

«Title» «First_Name» «Last_Name»

«Street»

«Area» «Postcode»

Dear First Name

Event Classification

Venue: Classification **Merge Fields inserted -** < text> replaced – correct position and spacing, punctuation maintained for all

«Practice_Run» - | «Race_Start» | «Type_ID» - «Race_Type»

We have received your application form for the above event. Your race entry details are as follows:

You are entered for the "Race_Type" event in the "Ability" (Category" class. Any ranking points earned on the day will be credited to your riding club, "Club". The provisional event timetable is:

09:15 hours

«Practice_Run» - 10:45 hours

11:00 hours

11:15 hours

«Race_Start» hours

15:30 hours

Registration

Course available for practice run

Race brief. All riders must attend.

Racing commences

«Type_ID» - «Race_Type» Event

Awards ceremony

Medals will be awarded in each category for first, second and third place. Expert and Elite are ability categories that are only open to riders holding a fully endorsed race licence. To qualify for Expert and Elite ranking points riders must present their licence at the time of registration.

All equipment must be in good, safe, working condition. A safety-approved cycling helmet must be worn at all times. Gloves and eye protection are also highly recommended. No cycle-cross or hybrid bikes are permitted. All riders must display their race number which should be attached to the front of the bike prior to staging.

This regional competition will be run according to MTB regulations. Riders must ensure they are familiar with these rules and regulations. We look forward to seeing you at this event.

Yours sincerely

Master document printed,

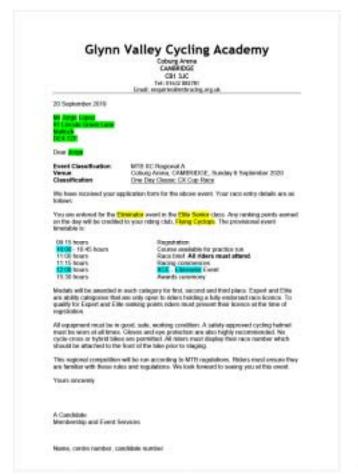
Name. centre no & candidate no in the footer 1 mark

A Candidate

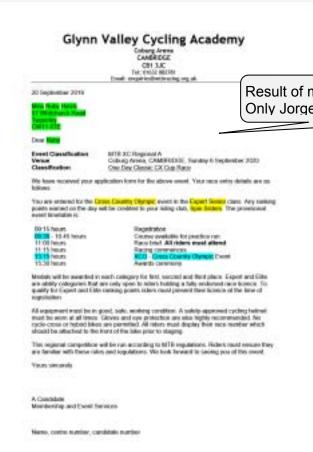
Membership and Event Services

Name, centre number, candidate number

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Result of merge - 3 forms printed – Only Jorge Lopez, Olaf Balcerzak, Ruby Harris 1 mark

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Task 6 - Presentation

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

1 mark

<u>Master slide items</u> same position and consistent on all slides Name, centre number, candidate number and auto slide numbers Logo inserted, appropriate size, aspect ratio maintained

1 mark 1 mark

Name owner marries cardidate marries



Competitive Cross Country Mountain Bike Racing

Guide presented by: Candidate Name

Slide 1 – changed to Title layout, title larger than subtitle, centred on slide, no bullet 1 r

1 mark

Name, certire mumber, carolicide mumber



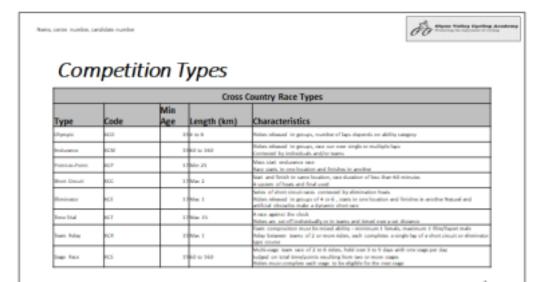
The Racing Course

- off-road venues with mixed terrain including parklands, forestry sites, fields and gravel paths
- · incorporates climbs, descents and technical features
- races held over multiple laps of an undulating circuit
- number of race laps depends on type of event and rider category less experienced riders tackle fewer laps
- to ensure similar lap times a hilly course will be shorter than a flat course

I

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22/08/2018



Slide 3 – layout changed to title and 5×9 table – all rows/columns fully displayed 1 mark All data copied into table, column widths adjusted, content fully visible, no split words 1 mark Text in all rows centre aligned vertically 1 mark New row inserted as first row of table, row merged and centre 1 mark Title Cross Country Race Types entered accurately in new row 1 mark Bold and 18pt font size applied to rows 1 and 2 only 1 mark Shading applied to rows 1 and 2 only 1 mark Plain table style applied no cell shading, all gridlines displayed 1 mark All slides printed with 2 slides to page 1 mark

- an other categories are pased on age

- progression to elite/expert is through ranking points
- · a full race licence is compulsory to qualify for national ranking points

.

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22/08/2018

Name carbo marries cardidate marries



Racing Equipment

- lightweight bikes with front or dual suspension, strong brakes on all wheels and a wide range of gears to cope with mixed terrain
- · wide knobbly tyres which help with off-road access
- bikes must be mechanically sound and capable of safely completing the course
- a protective helmet is compulsory

1

Nens, certe numbre, cardidate numbre



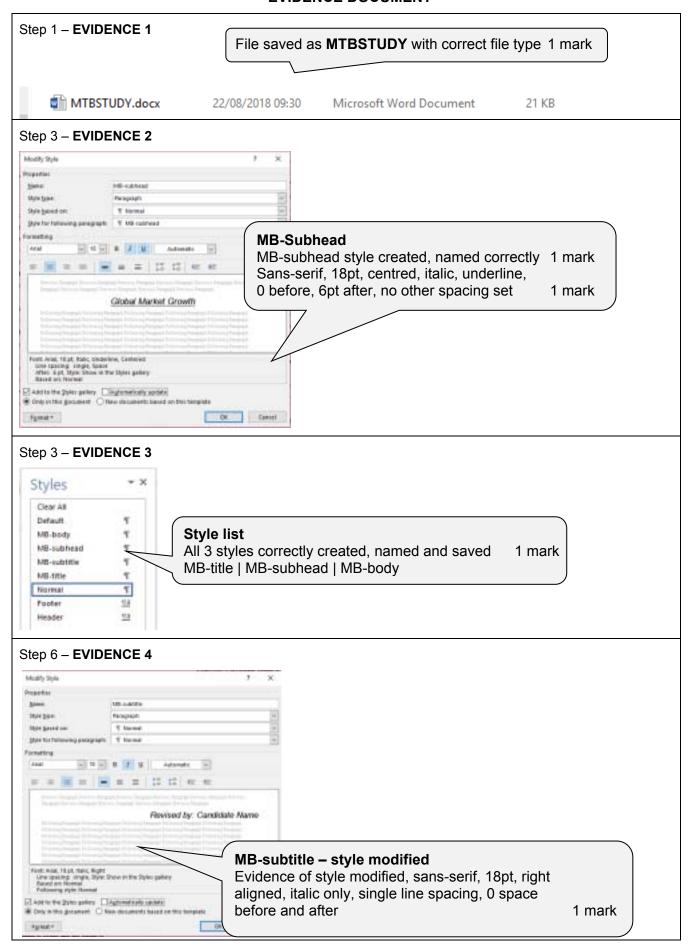
During the Race

- · a good grid position and start are vital in mass start races
- a front number plate must displayed at all times
- the use of headphones, earpieces or any communication devices is prohibited
- signposts every kilometre indicating the distance remaining to the finish line
- bike changes are not permitted
- · technical assistance can only be given in the dedicated technical zone
- · feeding is only permitted in the designated assistance zone

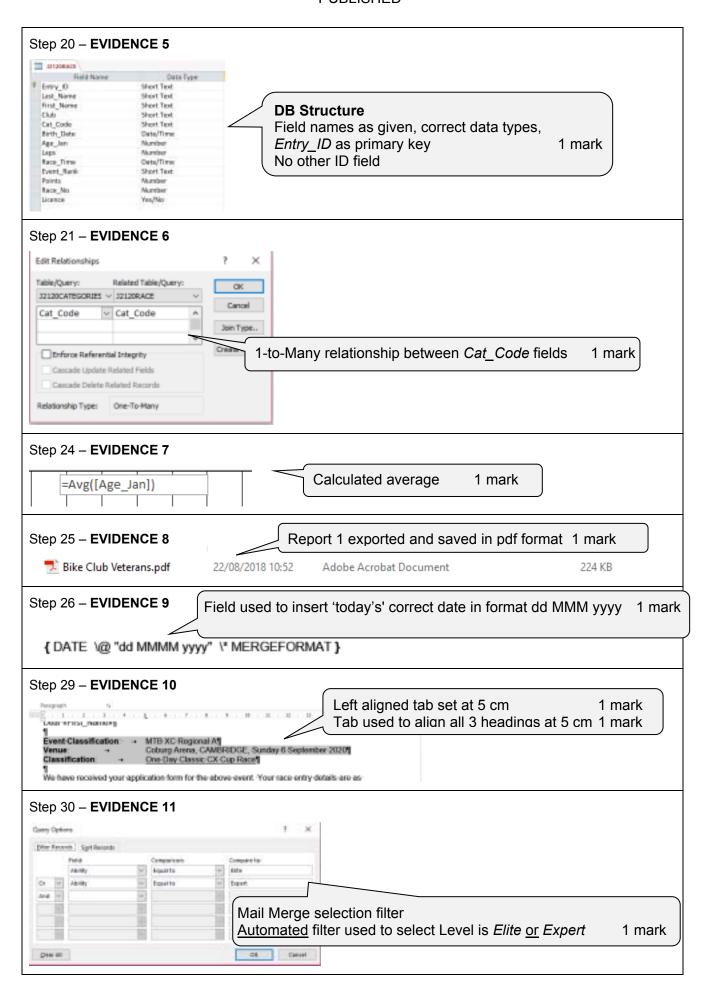
6

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EVIDENCE DOCUMENT



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