



Coimisiún na Scrúduithe Stáit  
State Examinations Commission

## Leaving Certificate Examination 2021

### Physical Education

Ordinary Level

Tuesday 29 June Afternoon 2:00 – 4:30

170 marks

Examination Number

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## Instructions

There are **three** sections in this paper.

|           |                        |          |
|-----------|------------------------|----------|
| Section A | Short answer questions | 40 marks |
| Section B | Case study             | 50 marks |
| Section C | Long questions         | 80 marks |

Answer questions as follows:

- any **five** of the twelve questions in Section A
- question 13 in Section B - Case Study
- any **two** of the five questions in Section C

Write your answers in the spaces provided in this booklet. There is space for extra work at the end of the booklet. Label any such extra work clearly with the question number and part.

This examination booklet will be scanned and your work will be presented to an examiner on screen. Anything that you write outside of the answer areas may not be seen by the examiner.

**Use blue or black pen only.**

**Section A****40 marks**

Answer any **five** questions, from questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.

**Question 1**

(a) Define the following: leisure and recreation and mass-participation sports.

|                           |
|---------------------------|
| Leisure and recreation    |
|                           |
| Mass-participation sports |
|                           |

(b) Give an example of **two** different pieces of safety equipment that must be worn when participating in a named physical activity.

|                    |
|--------------------|
| Physical activity  |
| Safety equipment 1 |
| Safety equipment 2 |

**Question 2**

There are a number of methods of practice that coaches can use when designing skill sessions for a physical activity.

With reference to **two** named skills, outline a different method of practice a coach could use for each skill.

|                 |
|-----------------|
| Skill 1         |
| Practice method |
|                 |
|                 |
|                 |
| Skill 2         |
| Practice method |
|                 |
|                 |
|                 |

### Question 3

Answer the following questions by putting a tick (✓) in the relevant box.

Tick **one** box only for each question.

**(a)** Amphetamines are examples of:

painkillers ☐

growth hormone ☐

stimulants ☐

**(b)** One of the possible side effects of using anabolic steroids is:

behaviour changes ☐

dehydration ☐

low blood pressure ☐

**(c)** Beta blockers are taken to:

mask pain ☐

keep heart rate low ☐

increase muscle growth ☐

**(d)** Increasing one's red blood cell count is commonly called:

blood injection ☐

blood doping ☐

blood freezing ☐

### Question 4

Name and explain **two** factors that can influence participation in physical activity.

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| 1. |
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### Question 5



**Figure 1**

Deirdre is playing a competitive basketball game for her club team. She finds herself defending the same person for the entire game.

Identify **three** things Deirdre should observe about her opponent that could help her defend better and win the ball back.

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| 1. |
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| 2. |
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**Question 6**

Outline the benefits of warming up before participating in physical activity.

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**Question 7**

Identify **three** principles of ethical practice in physical activity.

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### Question 8

Explain why an athlete might be granted a Therapeutic Use Exemption.

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### Question 9

(a) Identify **two** components of health-related fitness.

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(b) List **two** side effects of dehydration.

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**Question 10**

(a) Name a test that can measure agility.

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(b) Describe a test that can measure agility.

You may use an annotated drawing to help if you wish.

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**Question 11**

With reference to a named physical activity, identify **two** roles for performers and **two** non-playing roles.

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|--------------------|
| Performer role 1   |
|                    |
| Performer role 2   |
|                    |
| Non-playing role 1 |
|                    |
| Non-playing role 2 |
|                    |

**Question 12**

**(a)** What is a pedometer?

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**(b)** Describe **one** other method used to gather information about the amount of physical activity completed and include **one** advantage and **one** disadvantage of using that method.

|              |
|--------------|
| Method       |
|              |
|              |
|              |
| Advantage    |
|              |
| Disadvantage |
|              |

Examine the text, image and graph in the Case Study below and answer question 13.



**Figure 2**

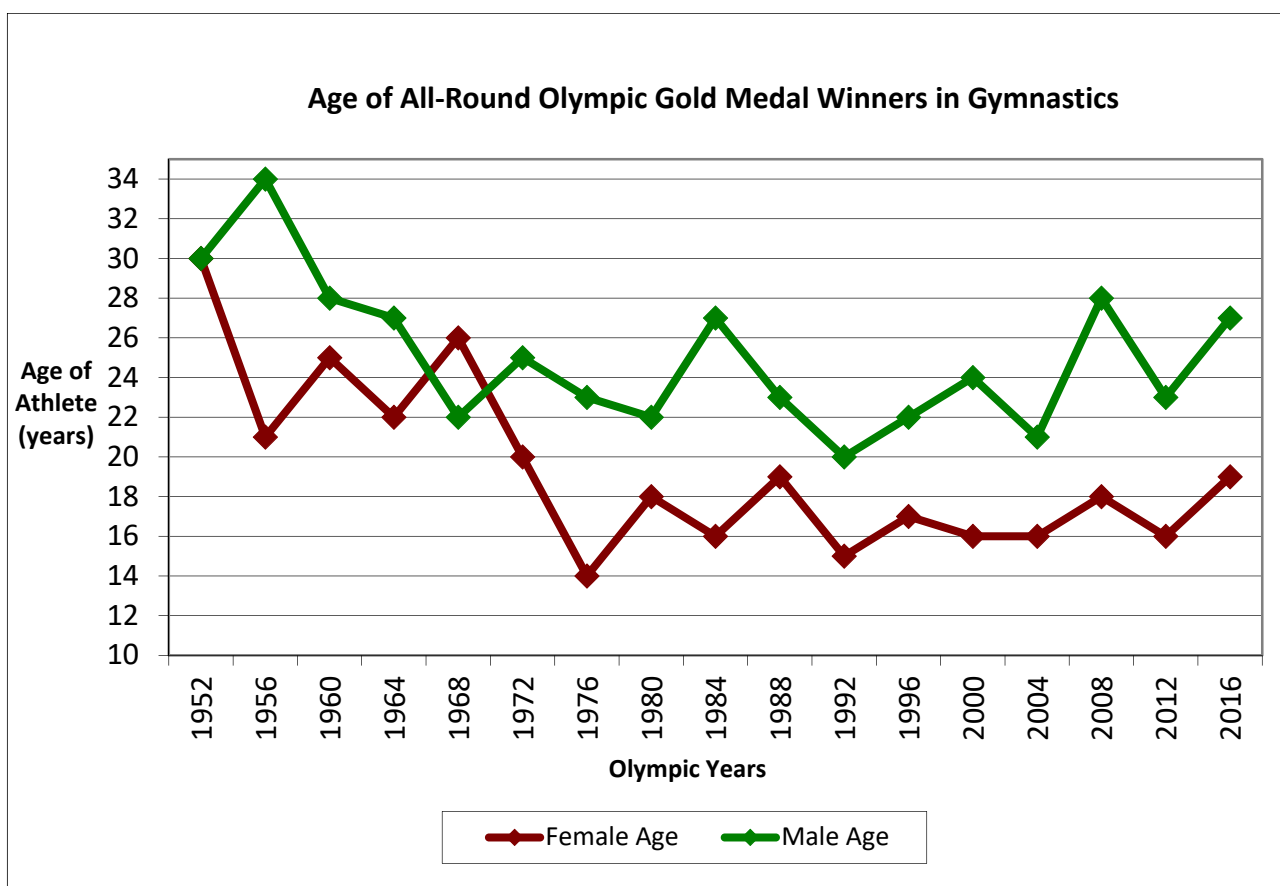
**Figure 2** Simone Biles in flight on the balance beam during Rio 2016.

Simone Biles, is an American gymnast. She is four-time world champion, winner of three individual Olympic gold medals and arguably one of the greatest gymnasts of all time. Her dominance is built on an utter mastery of gymnastic basics: with a tiny 4 foot 8 frame, incredible athletic ability and power, plus a low centre of gravity, she is built to be the ultimate gymnast.

Add in supreme levels of hard work, a great imagination when it comes to her craft and megawatt levels of personality, and she is almost unbeatable.

Female gymnasts are said to peak in performance at age 16. This is the minimum age at which they can compete at senior level events, including the Olympics. In reality, many female gymnasts are considered to peak at 12. While male gymnasts bulk up with puberty and become stronger competitors, their female peers are generally considered more effective as children. "You want to be light in the gym, you want to be petite," says Biles, who started relatively late, at the age of 6. For females, once you go through puberty, your body changes, and that makes it harder to do gymnastics.

Biles attended an ordinary school until her early teens. Her training schedule became such that only home-schooling, on site at the gym, made sense. Her short experience of high school was unhappy. "You're at that age where there are boys in the class and you go to dances and I was obviously like," her voice drops, "the strongest kid in my entire school. So I hid my muscles because the guys would stare and be like, 'Oh my gosh, look at her muscles!'"



**Figure 3**

**Figure 3** In 1997, the minimum age at which gymnasts could compete at senior-level was set at 16. (Fédération Internationale de Gymnastique FIG).

Biles is unsure about competing in Tokyo 2020+1 – “Mentally I don’t know if I can handle it. It’s going to be hard. I was already battling with myself mentally if I could do it this year. I have to listen to my mind and body and go into the gym and see how I feel.”

Irish gymnast Rhys McClenaghan admires Simone Biles, and said the following after meeting his idol: “It was great to chat with her because she is such an amazing athlete. Simone is so good that she could compete in men’s events and make finals and bring home medals. Her standards are something else. She has entered territory that nobody has been before and yet she still looks to improve and raise the bar. Simone could still be doing the same routines that she did in 2014 and that would be enough to win but instead she keeps pushing back the boundaries. She could fall three times and still win. Her team have a motto, ‘Be Undeniable’, and that’s what she is – and that’s what I want to be.”

**Question 13****(50 marks)**

**(a)** What characteristics does Simone Biles display, that Rhys McClenaghan admires?

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**(b) (i)** With reference to the case study, give an example of social regulation of the body.

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- (ii) Explain how social regulation of the body impacts on the participation of women in physical activity and sport.

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- (c) (i) What is the main difference in participation between male and female gymnasts in **Figure 3**?

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- (ii) With reference to the case study, give examples of the influences that impact on the participation patterns of boys and girls in gymnastics.

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**(d)** How can sports psychology benefit an elite athlete?

[illegible]

- (e) (i)** Identify **two** performance-related components of fitness required for gymnastics. Support your answer with reference to the case study.

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- (ii)** Suggest ways to develop the performance-related components of fitness identified by you in question **13 (e) (i)**, in training.

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## Section C

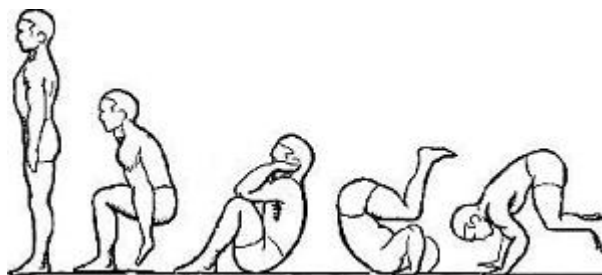
**80 marks**

Answer any **two** questions, from questions 14, 15, 16, 17 and 18.

### Question 14

**(40 marks)**

(a)



**Figure 4**

(i) In what plane of movement does a backward roll take place in?

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(ii) With reference to named physical activities, describe **two** axes of movement of the human body.

You may use an annotated drawing to help if you wish.

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- (iii) Draw and label a diagram to illustrate a third class lever.



- (b) The following table shows the Top 10 programmes on Irish television in 2019.

| Rank | Programme                                           |
|------|-----------------------------------------------------|
| 1    | The Late Late Toy Show                              |
| 2    | All Ireland Football Final (replay), Dublin v Kerry |
| 3    | All Ireland Football Final, Dublin v Kerry          |
| 4    | Six Nations Live, Ireland v England                 |
| 5    | All Ireland Hurling Final, Kilkenny v Tipperary     |
| 6    | Six Nations Live, Ireland v France                  |
| 7    | Rugby World Cup 2019 Live, New Zealand v Ireland    |
| 8    | I'm A Celebrity Get Me Out Of Here                  |
| 9    | All Ireland Football Semi-Final, Dublin v Mayo      |
| 10   | Room to Improve                                     |

- (i) How many of the top 10 are sports programmes?

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(ii) Suggest a reason why these sporting programmes are in the top 10.

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(iii) Name **two** other forms of media coverage in sport.

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| 2. |

(iv) Outline **three** positive influences media coverage can have on sport participation.

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**Question 15**

**(40 marks)**

- (a)** **Figure 5** shows common food sources of carbohydrates.



**Figure 5**

- (i)** What is carbohydrate loading and when might it be used by an athlete?

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- (ii)** With reference to a named physical activity, outline the nutritional considerations for an athlete during that activity.

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**(b)** Complete the table below. State the role of each supplement and a challenge of their use.

| Supplement | Role | Challenge |
|------------|------|-----------|
| Protein    |      |           |
| Creatine   |      |           |

**(c) (i)** What are the roles and responsibilities of a National Governing Body?

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- (ii) How can Physical Education lessons help increase the participation levels of young people in physical activity?

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- (iii) Describe **one** nationwide initiative that aims to improve physical activity in Irish schools.

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**Question 16****(40 marks)**

**(a)** Before carrying out any fitness testing, identify **three** checks the tester should complete first.

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**(b) (i)** Explain why recovery is an essential part of a training plan.

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**(ii)** Describe **two** strategies used to support recovery following training.

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- (c) With reference to a named physical activity, highlight changes in technology that may have had a positive and negative influence on that physical activity.  
You are **not** allowed to use GPS technology and heatmaps in your answer.

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(d)



**Figure 6**

Katie Ledecky broke a record. Michael Phelps won silver. Guess who won the headline?

Not only did Katie Ledecky set a new world record in the women's 800 m freestyle, she also became the first woman to win gold in the 200 m, 400 m, and 800 m freestyle races since Debbie Meyer in 1968.

But by putting the news of Ledecky's major record in much smaller font than Phelps's tie for a silver medal, the newspaper made it seem like even the most historic achievements of a woman are less important than a pretty good performance from a man.

What impact does media coverage like this have on women in sport?

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**Question 17****(40 marks)****(a) (i)** Define skill.

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**(ii)** With reference to a skill in a named physical activity, using an **X** identify where you would place this skill on each of the skill continua below.

|                   |
|-------------------|
| Physical activity |
| Skill             |



(b)



**Figure 7**

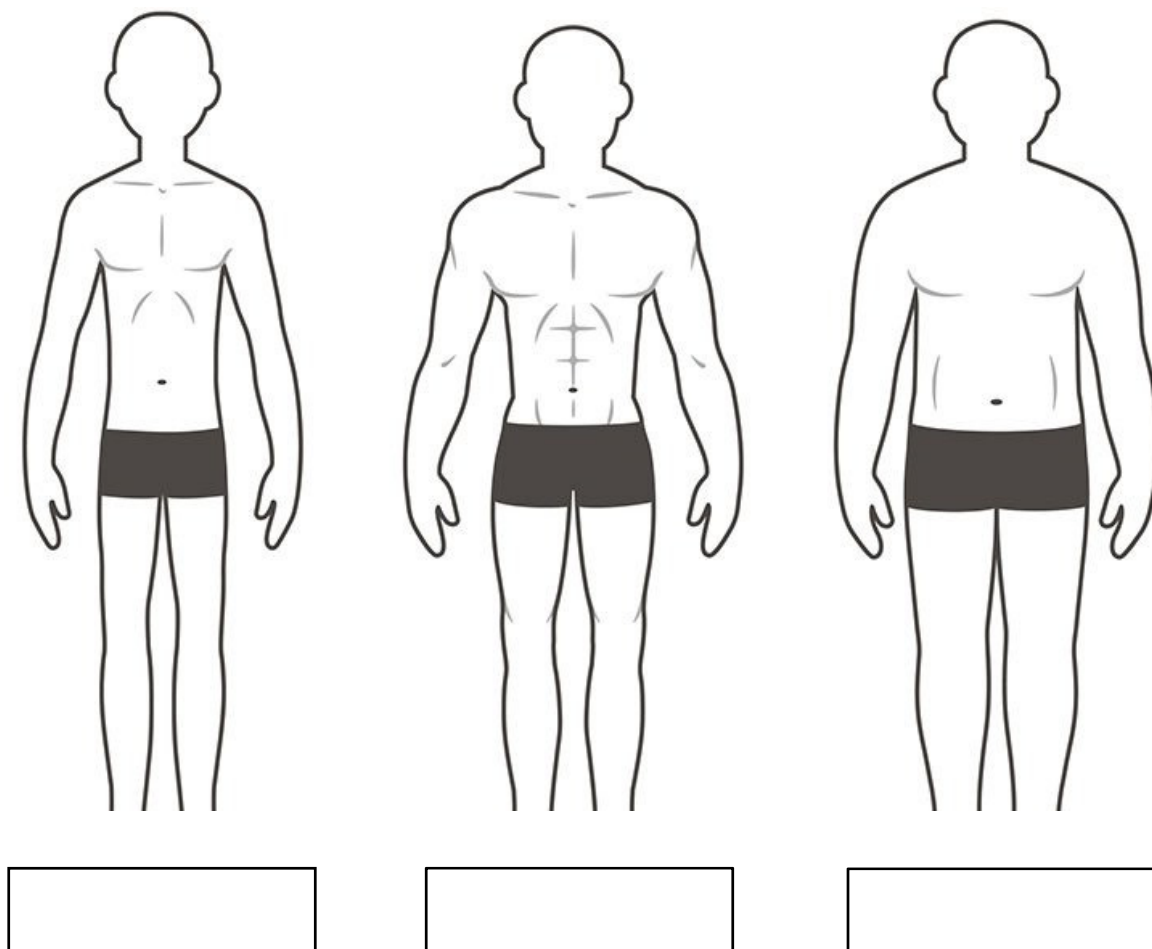
- (i) With reference to a named physical activity, discuss how concentration can influence an athlete's performance in that physical activity.

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- (ii) With reference to a named physical activity, outline a strategy an athlete could use to enhance concentration during competition in that physical activity.

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(c) (i) Label the body types shown in **Figure 8**.



**Figure 8**

(ii) For **one** of the body types identified by you in question 17 (c) (i), give an example of a physical activity someone of that body type might participate in.

|                   |
|-------------------|
| Body type         |
| Physical activity |

- (d) Hegemony refers to the dominance of one group over another, supported by legitimating norms and ideas. For example, the Irish men's first International game of rugby was played in 1875. The Irish women's team played their first International game of rugby in 1993. Outline **two** issues that are caused by hegemony in sport and physical activity.

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**Question 18****(40 marks)**

**(a) (i)** Define physical activity.

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**(ii)** Describe the social benefits of physical activity for health and wellbeing.

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**(b)** As part of your Leaving Certificate Physical Education class you organised an event/ performance in a physical activity.

**(i)** Identify **four** roles that needed to be filled for the event/performance to be a success.

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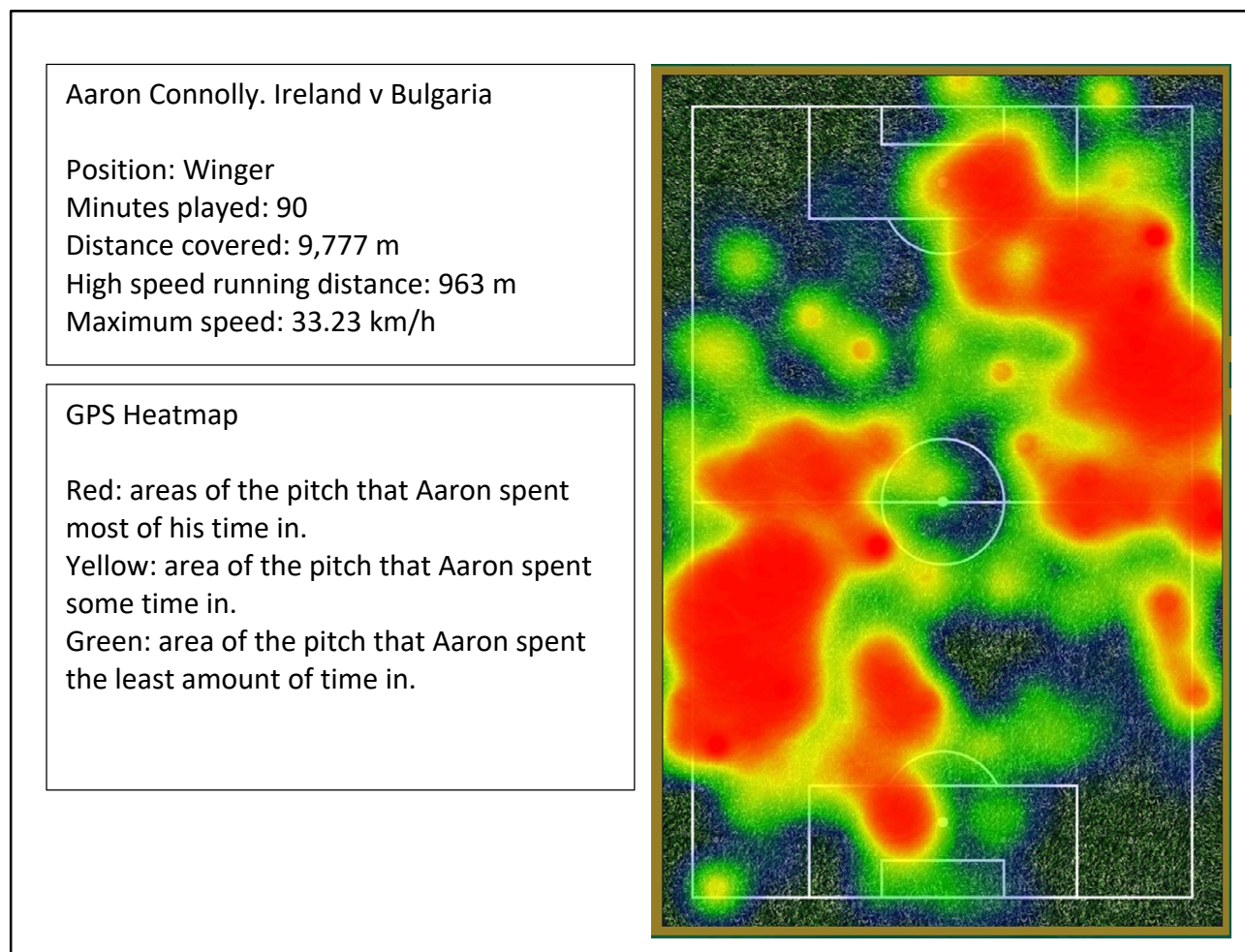
- (ii) With reference to the physical activity your event/performance was in, explain the rules of that physical activity.

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- (iii) What safety measures did you consider prior to running the event/performance?

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(c)



**Figure 9**

**Figure 9** shows the GPS heatmap for Irish soccer player Aaron Connolly during the Union of European Football Associations (UEFA) nations league game versus Bulgaria. The accompanying text provides other details collected from GPS technology.

(i) What type of information is available from **Figure 9**?

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- (ii) How can a coach use this information to benefit the performer and to inform training plans for the performer in the future?

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**Space for extra work**

**Indicate clearly the question number and part of the question (s) you are answering.**

[illegible]

**Indicate clearly the question number and part of the question (s) you are answering.**

[illegible]

## Acknowledgements

### Images

Image on page 5: <https://www.basketballireland.ie/news-detail/10066806/> (Accessed: 25 September 2020)

Image on page 10: <https://www.insider.com/simone-biles-racism-in-gymnastics-opponent-alludes-to-blackface-2020-3> (Accessed: 28 October 2020)

Image on page 16: <https://gymnasticszone.com/beginner-backward-roll-safety-concerns/backward-roll/> (Accessed: 23 December 2020)

Image on page 19: <https://hsph.harvard.edu/nutritionsource/carbohydrates/> (Accessed: 24 February 2021)

Image on page 24: Paul Newberry, Associated Press, Bryan College Station Eagle (Accessed: 12 September 2020)

Image on page 26: <https://gwtoday.gwu.edu/gw-sports-teams-back-action> (Accessed: 23 June 2020).

Image on page 27: <https://www.muscleandstrength.com/articles/body-types> (Accessed: 23 December 2020)

Image on page 31: Tweet @FAIreland, 4 September 2020, heat map powered by @statsports (Accessed: 28 September 2020)

### Texts

Text on page 10: Brookes, Emma (2019) <https://www.theguardian.com/sport/2019/mar/16/simone-biles-therapy-times-didnt-want-set-foot-gym> (Accessed: 23 December 2020)

Text on page 10: adapted from <https://www.olympicchannel.com> (Accessed: 13 September 2020)

Text on page 11: adapted from Simone Biles in conversation with Juliet Macur, 2020 (Accessed: 13 September 2020)

Text on page 11: adapted from Kelly, David (2020) *Legend Simone Biles is my inspiration in quest to bring home Tokyo gold: Rhys McClenaghan*. <https://belfasttelegraph.co.uk> (Accessed: 23 December 2020)

Text on page 17: <https://about.rte.ie/2020/01/13/rte-shows-clinch-42-spots-in-top-50-most-watched-of-2019/> (Accessed: 25 October 2020)

Text on page 24: Emily Crockett on vox.com (Accessed: 12 September 2020)

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Leaving Certificate – Ordinary Level

## Physical Education

Tuesday 29 June

Afternoon 2:00 – 4:30