



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2023
Physical Education
Higher Level

Friday 23 June Afternoon 2:00 - 4:30
250 marks

Examination Number

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Day and Month of Birth

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For example, 3rd February
is entered as 0302

Centre Stamp

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Instructions

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

Section A	Short Questions	80 marks
Section B	Case Study	50 marks
Section C	Long Questions	120 marks

Answer questions as follows:

Any **10** of the 12 questions in Section A

Question 13 in Section B - Case Study

Any **three** 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. You may also ask for supplementary paper. Label any extra work clearly with the question number and part.

Write your answers in blue or black pen.

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.

Answer any **ten** questions from questions 1 - 12.

Question 1

The planes of the body are anatomical concepts often used by health professionals to describe how your body moves during exercise or other activities.

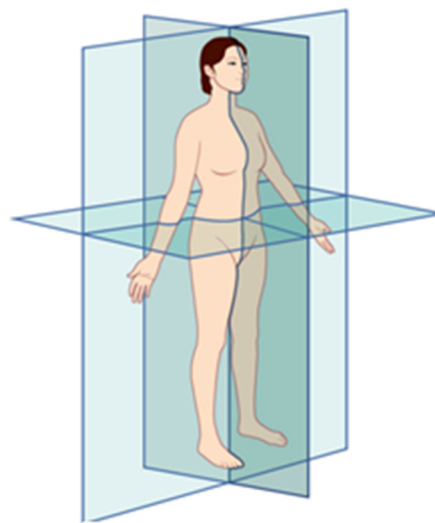


Figure 1

(a) Name any **two** planes of human movement.

1.
2.

(b) Describe the **two** planes of human movement, correctly named in (a). Use a sporting example of movement in each plane to support your answer.

1.
2.

Question 2



Figure 2. Former Republic of Ireland football (soccer) captain and assistant manager Roy Keane

Explain **two** different methods of physical fitness training that could be used to help prepare athletes for performance in a physical activity of your choice.

Physical Activity
1.
2.

Question 3

(a) What is social regulation of the body?

(b) Discuss how social regulation of the body impacts on the participation levels of men and women in physical activity.

Question 4

- (a) Identify what you believe are the **two** most important factors that influence performance in a physical activity of your choice.

Physical Activity
1.
2.

- (b) Discuss why you believe that the factors, correctly named in (a), are the **two** most important factors that influence performance in your named physical activity.

1.
2.

Question 5

Effectiveness of a school-community linked program on physical activity levels and health-related quality of life for adolescent girls

[Meghan M Casey](#), [Jack T Harvey](#), [Amanda Telford](#), [Rochelle M Eime](#), [Amanda Mooney](#) & [Warren R Payne](#)

Figure 4

Figure 4 gives the name and authors of a 2014 study that concluded:

Positive outcomes were achieved from a modest school-community linked intervention.

Outline **two** ways in which pathways between school and community based physical activity could be strengthened.

1.
2.

Question 6

Nikki Hamblin (New Zealand) and Abbey D'Agostino (United States) are runners who received an award from the International Fair Play Committee for helping each other finish after they both fell during a 5000m race at the 2016 Rio Olympic Games.



Figure 5

Discuss the notion that:

'Sportsmanship may lead to enhanced engagement in physical activity, while gamesmanship may contribute to lowering levels of engagement in physical activity'.

Question 7

Johnny Sexton was named World Rugby Player of the year in 2018.
Johnny is renowned for the quality of his kicking game.



Figure 6. Johnny Sexton

- (a) Which of Newton's laws of motion can be used to calculate the acceleration of a rugby ball which has been kicked?

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- (b) Name and define another **one** of Newton's laws of motion.

- (c) Explain why you would use Newton's laws of motion when analysing human movement.

Question 8

Define each of the following terms as they relate to physical activity:

Rules**Rituals****Conventions**

Rules
Rituals
Conventions

Question 9

Israel Olatunde became Ireland's fastest man over 100m by running a time of 10.17 seconds at the European Athletics Championships in Munich on 16 August 2022.



Figure 7

Describe **two** principles of effective practice that could have been utilised in the design of Olatunde's practice schedules.

1.
2.

Question 10

Describe how any **two** energy systems used by the human body may contribute to performance in a physical activity of your choice.

[illegible]

Question 11

Having conducted a survey on the physical activity patterns and behaviours of boys and girls in a school, the PE teacher discovered that the boys in the school were far more active than the girls.

Discuss **two** ways in which a school could tackle a gender imbalance in physical activity participation levels.

1.
2.

Question 12



Figure 8. Physical Education teacher and Kerry Gaelic footballer David Clifford concentrating as he is about to execute a free kick

- (a)** Outline how the psychological factor concentration can impact the performance levels of an athlete.

- (b)** Describe **one** strategy that an athlete might use to enhance their concentration for performance.

Examine the text and images in the Case Study below and answer question 13.



Figure 9. Limerick senior hurling coach
Paul Kinnerk

While sport offers fantastic opportunities for people to participate in physical activity it can also provide a platform for people to become involved in sport through the medium of coaching. Sport Ireland state that:

Coaching is central to player development and to sport performance at all levels of competition, and coaches are key agents in ensuring a quality experience for existing and new participants in sport

Many qualities are deemed essential for effective coaching. Having an in depth knowledge of the sport as well as excellent communication and organisation skills are important for high quality coaching. A key coaching skill that can lead to athletes optimising their performance is the effective use of feedback.

Coaches also need the technical skills required to organise, plan and deliver training and practice schedules to their athletes. From the development of periodised plans to the design and delivery of individual training sessions, coaches are required to assist their athletes in terms of their physical, tactical as well as technical development.



Figure 10. Manchester City's Pep
Guardiola

Many people would argue that one of the most important roles of a coach at any level is to develop the skills and techniques of their athletes. The coach should know how each skill or movement pattern of their sport is performed, and should help their athletes develop these skills. Understanding the needs of each individual athlete for the stage of skill learning that they are at is essential for the coach so that they can enhance skill performance in their athletes.

Coaches with an understanding of biomechanics can use their knowledge to analyse and assess their athletes' performance. At high levels of competition coaches may consider the movement economy of their athletes and put steps in place to improve this in order to help optimise the athlete's performance.



Figure 11

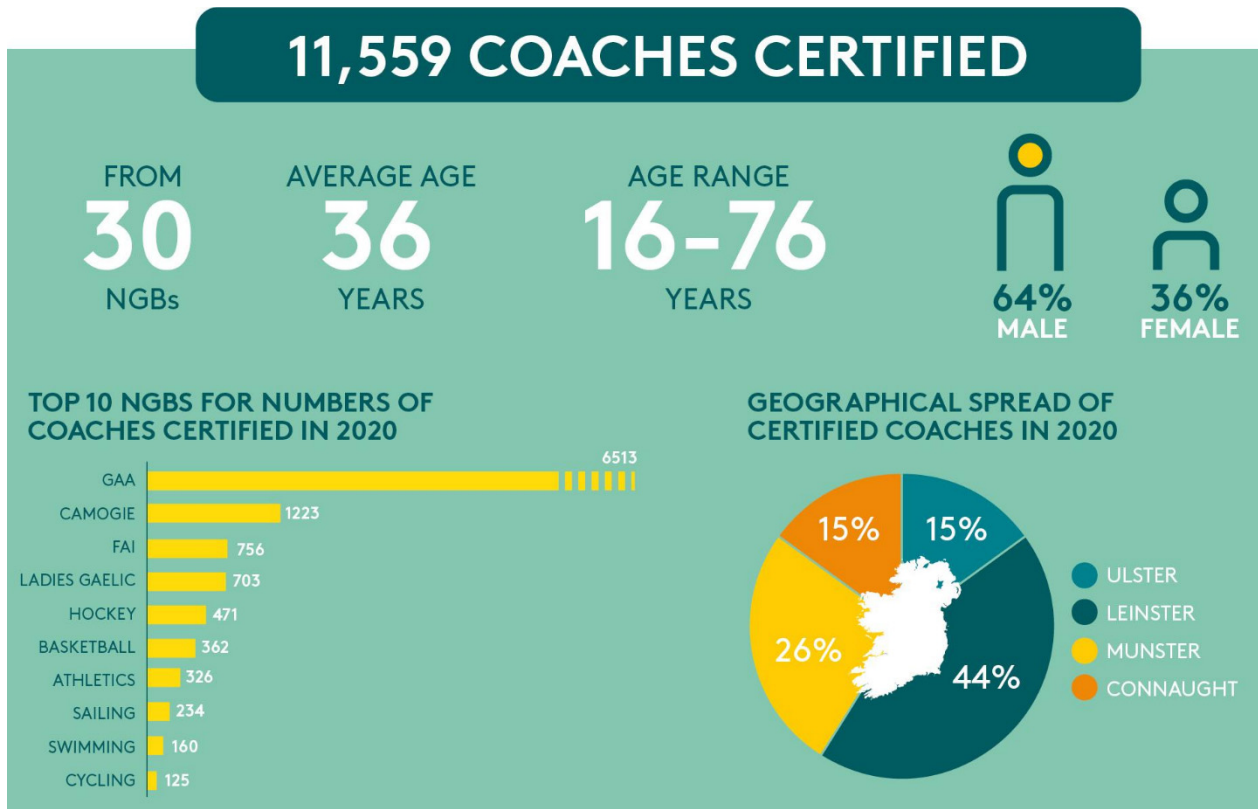


Figure 12. Data on coaching numbers in Ireland



Figure 13. Anne Downey

The 2018 Children's Sport Participation and Physical Activity (CSPPA) study revealed that boys are more physically active than girls and participate in community sport more than girls do. At post-primary level 66% of boys participate in community sport while only 52% of girls do.

This clear gender imbalance in physical activity and sport participation also seems to pervade the sports coaching world, where male coaches are far more prevalent than female coaches. At the last four Olympic games only 11% of coaches were female. Kilkenny woman Anne Downey made national headlines in 2020 when it was announced that she would coach an adult men's hurling team.

Question 13**(50 marks)**

(a) 'Sport' is a concept of physical activity. Explain 'sport'.

(b)

A key coaching skill that can lead to athletes optimising their performance is the effective use of feedback.

Discuss the importance of **two** different types of feedback that a coach could use to enhance athlete performance, in a physical activity of your choice.

Physical Activity
1.
2.

This question continues on the next page

(d)

Understanding the needs of each individual athlete for the stage of skill learning that they are at is essential for the coach so that they can enhance skill performance in their athletes.

Describe the performance of a named skill by athletes at **three** different stages of skill learning.

Skill
1.
2.
3.

This question continues on the next page

- (e)** Examine how economy of movement may impact on the quality/effectiveness of a named skill in a physical activity of your choice.

[illegible]

Answer any **three** questions from questions 14 - 18.

Question 14**(40 marks)**

Figure 14

- (a) (i) 'Outdoor and adventure activities' is a concept of physical activity. Define 'outdoor and adventure activities'.

- (ii) Name **four** 'outdoor and adventure activities', other than water activities.

1.
2.
3.
4.

This question continues on the next page

(b) It could be argued that confidence is the most valuable psychological factor that contributes to effective performance in a range of outdoor and adventure activities.

(i) Define confidence related to sports performance.

(ii) Discuss how confidence can impact performance in a physical activity of your choice.

Physical Activity

This question continues on the next page

- (c)** Being involved with a sports team can provide a valuable social outlet for a person while also helping them to be physically active.

Discuss **three** social benefits of physical activity for teenagers.

[illegible]

This question continues on the next page

- (d)** The principles of training are used by coaches in the design of training programmes.

Examine the impact that any **two** principles of training can have on the performance of an athlete.

[illegible]

Question 15**(40 marks)****(a)**

Leona Maguire became the first Irish woman to win an event on the LPGA (Ladies Professional Golf Association) Tour - the '2022 LPGA Drive On Championship' in Florida. Leona used PING golf clubs during this event.

Figure 15

Discuss the importance of selecting and maintaining suitable equipment in a physical activity of your choice.

Physical Activity

This question continues on the next page

(b)

Kinetica is an Irish sports nutrition brand that batch test their products to comply with the world anti-doping agency standards.



Figure 16. Leona Maguire is a brand ambassador for Kinetica

(i) Name **two** sports nutrition supplements commonly used by athletes.

1.
2.

(ii) Explain how **one** of the supplements named by you in (i) can help optimise athlete performance.

This question continues on the next page

(c)

Athlete's Sport/NGB	Substance that athlete used	Sanction imposed on athlete
<i>Triathlon Ireland</i>	Ligandrol	4 years
<i>Weightlifting Ireland</i>	Nandrolone	4 years
GAA	Meldonium	4 years
<i>Motorsport Ireland</i>	N/A	4 years

Figure 17. Sanctions imposed by the Irish Sport Anti-Doping Disciplinary Panel in 2020

- (i) According to **Figure 17** the weightlifting Ireland athlete used the anabolic steroid Nandrolone.

Identify **two** reasons why this athlete might have used an anabolic steroid.

- (ii) Identify another category of performance enhancing drug and state **one** way in which a substance from this category might affect athlete performance.

This question continues on the next page

- (iii) **Figure 17** states that there is no information available on the substance that the Motorsport Ireland athlete was banned for.

State **two** anti-doping rules that this athlete may have violated.

This question continues on the next page

(d) Additional to the partnership deal Leona Maguire has with Kinetica, she also has deals with Puma, KPMG, Davy, Kingspan, Kastus and the Slieve Russell Golf Club.

(i) What is sponsorship in sport?

(ii) Examine the positive impact that Leona's sponsorship deals may have for her.

Question 16

(40 marks)

(a)

During the NFL (American National Football League) Combine event athletes are put through a series of physical and mental tests which give them the opportunity to showcase their athleticism and mental preparedness to coaches and team managers.



Figure 18

Name and justify the selection of **four** tests that you would include in a physical fitness test battery for a physical activity of your choice.

Physical Activity	
Test	Justification for test
1.	
2.	
3.	
4.	

This question continues on the next page

(b) Describe the FITT formula.

This question continues on the next page

- (d) Compare **two** physical activities of your choice from the perspective of the artistic/aesthetic criteria of performance in the activities.

At least one of the physical activities selected must be an artistic/aesthetic activity.

[illegible]

Question 17

(40 marks)

(a)

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct-Dec
Training Phase	Pre-Season			Competitive Season						Off-Season
Training Block	Block 1	Block 2		Block 3		Block 4		Block 5		
Plyometrics	Slow	Moderate		Fast		Slow		Fast		
Loaded power	Heavy	Moderate		Light		Heavy		Light		
Strength	Moderate Reps	Moderate Reps		Low Reps		High Reps		Low Reps		
Conditioning	Long interval	Short interval		Short Interval		Continuous		Short Interval		

Figure 19. A periodisation plan for a team

(i) Define periodisation.

(ii) Identify **four** components of fitness that are being targeted at some stage during the plan in **Figure 19**.

1.
2.
3.
4.

(iii) State what the athlete is expected to do during 'Block 3' of the periodised plan in **Figure 19**.

This question continues on the next page

- (b) Examine **two** nutritional considerations that an athlete might implement after performance to enhance recovery. You are not permitted to use hydration or sports drinks.

1.
2.

This question continues on the next page

(c) Sports tourism is big business!

Discuss how sports marketing can impact on the development of tourism in Ireland.

[illegible]

This question continues on the next page

Question 18

(40 marks)

(a)

In winning a silver medal at a world cup in 2018, the Irish hockey team displayed exceptional skill and ability as well as high levels of physical conditioning.



Figure 20

(i) Define ability.

(ii) Are ability and skill the same thing? Justify your response.

This question continues on the next page

(b)



Figure 21

In August 2021 the Football Association of Ireland (FAI) announced that there would be equal pay for players representing the Ireland senior women's and Ireland senior men's national football (soccer) teams.

In October 2022 the Republic of Ireland women's soccer team qualified for the world cup finals for the first time in their history.

Identify **two** principles of ethical practice **and** outline why they are important for sport.

1.
2.

This question continues on the next page

(c) (i) Define body image.

(ii) 'By showcasing lean bodies of women and sculpted muscular bodies of men the media are helping to promote physical activity participation in young women and men'.

Discuss the validity of this statement.

This question continues on the next page

(d) (i) Identify **two** characteristics associated with hegemonic femininity.

(ii) Explain why the characteristics, correctly identified by you in **(i)**, might impact on the participation of girls in sport and physical activity.

[illegible]

Space for extra work

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

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Acknowledgements

Q1: <https://www.healthline.com/health/body-planes> (1st accessed on 21/9/22)

https://commons.wikimedia.org/wiki/File:Planes_of_Body_unlabeled.jpg (1st accessed on 21/9/22)

Q2: <http://witdses.weebly.com/student-blogs/trials-make-or-break> (1st accessed on 21/9/22)

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Q6: <https://www.theguardian.com/sport/2016/aug/21/new-zealand-and-us-runners-awarded-for-sportsmanship> (1st accessed on 21/9/22)

Q7: <https://www.theroar.com.au/2018/02/07/sensational-sexton-kicks-ireland-victory-france/> (1st accessed on 21/9/22)

Q9: <https://www.the42.ie/history-maker-israel-olatunde-broke-irish-record-with-burst-spikes-5842608-Aug2022/> (1st accessed on 29/9/22)

Q12: <https://www.irissexaminer.com/sport/gaa/arid-40923497.html>
(1st accessed on 21/9/22)

Q13: Adapted from: <https://www.thetimes.co.uk/article/limerick-reaping-the-benefits-of-paul-kinnerks-revolution-hnp6bhdwh> (1st accessed on 21/9/22)

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<https://racketrampage.com/are-tennis-lessons-worth-it/> (1st accessed on 24/10/22)

Q14: <https://www.failteireland.ie/tourism-news/19m-investment-announced-water-based-activity-facilities.aspx> (1st accessed on 21/9/22)

Q15: <https://www.irishgolfdesk.com/news-files/2022/2/18/kinetica-sports-welcomes-home-lpga-champion-and-brand-ambassador-maguire> (1st accessed on 21/9/22)

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Q16: http://www.espn.com/nfl/photos/gallery/_/id/8982370/image/11/spring-step-nfl-combine
(1st accessed on 17/11/22)

Q17: Adapted from <https://www.youtube.com/watch?v=DGsvka70Uag> (1st accessed on 21/9/22)

Q18: <https://www.dublinlive.ie/sport/ireland-hockey-homecoming-14994261> (1st accessed on 21/9/22)

<https://www.theguardian.com/football/2022/oct/11/scotland-republic-of-ireland-womens-world-cup-playoff-match-report> (1st accessed on 17/11/22)

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Leaving Certificate – Higher Level

Physical Education

Friday 23 June

Afternoon 2:00 - 4:30