

# **GCSE (9-1)**

# **Physical**

# **Education**

**Feedback on June 2019 –  
Components 1 and 2  
(1PE0 01 and 1PE0 02)  
online**





# Aims and Objectives

- Receive feedback on national performance of candidates on Pearson Edexcel (9-1) GCSE Physical Education Components 1 and 2 of the 2019 examination series
- Consider a range of responses in a variety of questions and explain how marks were awarded
- Address common issues and FAQs



# Session agenda

Timescale	
2 minutes	Introduction to assessment
25 minutes	Feedback on candidates' performance in MCQs and short answer questions across paper 1 and paper 2
30 minutes	Feedback on candidates' performance in long answer and extended answer questions across paper 1 and paper 2
3 minutes	Summary (including common issues) and unanswered questions



# Component 1 and 2 overview

Component	Title	Summary of assessment
Paper 1 (36% – 90 marks) 1 hour and 45 minutes	Fitness and Body Systems	Examination Multiple choice, short and extended open response questions
Paper 2 (24% – 70 marks) 1 hour and 15 minutes	Health and Performance	Examination Multiple choice, short and extended open response questions



# Variation of questions throughout both paper 1 and paper 2

(e) Which **one** of the following is responsible for clotting the blood? 6 Complete the following statements about movement patterns.

- ☐ A Plasma
- ☐ B Platelets
- ☐ C Red blood cells
- ☐ D White blood cells

(1)

(a) Movement patterns occur in body planes and around

.....

(b) There are three main body planes: sagittal, transverse and

.....

(c) A tucked front somersault takes place in the sagittal plane around the

.....

(d) A full twist occurs in the transverse plane around the

.....

(4)

8 To make sure training is effective it should be monitored.

Explain why it is important to use fitness tests to monitor a training programme.

(3)



# Variation of questions throughout both paper 1 and paper 2 continued

13 Tennis players will work at different intensities during a match.

Figure 7 shows three different phases of a tennis match.



(Source: © Clive Brunskill/Getty Images)

(Source: © Julian Finney/Getty Images)

(Source: © Andrew Yates/Getty Images)

**Figure 7**

Examine the importance of the respiratory system during the different phases shown in **Figure 7**.

(9)

15 Discuss the impact a sedentary lifestyle can have on physical health.

(9)



# Feedback and variation of candidates' performance on MCQs

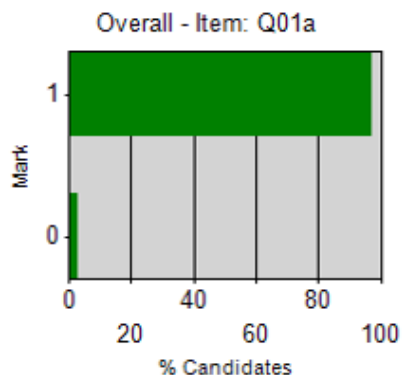


# Variation of candidates' performance on MCQs

- Rank order of accessibility of common questions comparable between Component 1 and Component 2
- Component 1 – 1a, 1c, 1e and 1g were most accessible
- Component 2 – all MCQs were well answered by the majority of candidates.

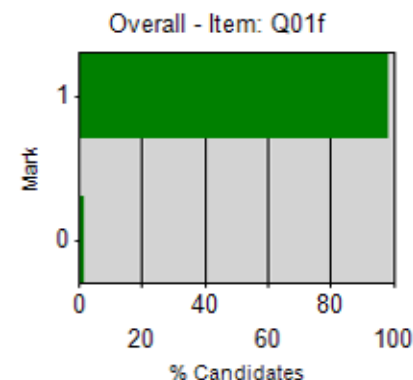
## Paper 1 MCQ

Mark	No Candidates	% Candidates
0	696	2.8%
1	23862	97.2%
Total	24558	



## Paper 2 MCQ

Mark	No Candidates	% Candidates
0	359	1.7%
1	20973	98.3%
Total	21332	





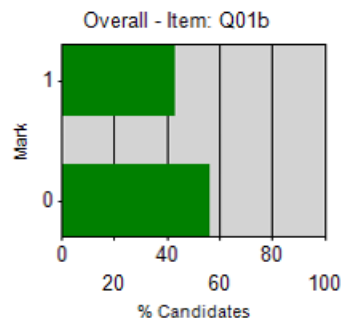


# Variation of candidates' performance on MCQs

- The rank order of most challenging questions from component 1 and 2
- Component 1 – 1b, 1f, and 1h were least accessible for candidates
- Component 2 – 1a although very well answered it was the least accessible for candidates on this component

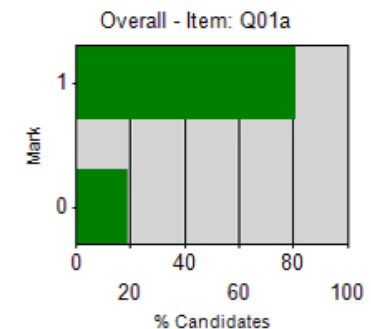
Paper 1  
MCQ  
analysis  
from  
Principle  
examiner  
report

Mark	No Candidates	% Candidates
0	13869	56.5%
1	10676	43.5%
Total	24545	



Paper 2  
MCQ  
analysis  
from  
Principle  
examiner  
report

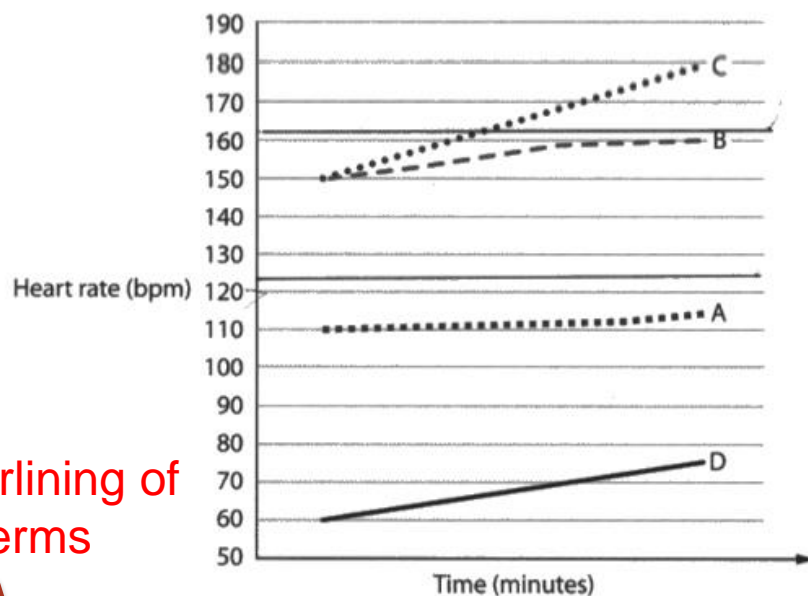
Mark	No Candidates	% Candidates
0	4017	18.9%
1	17290	81.1%
Total	21307	





# Student response – what candidates did well

**Figure 2** shows the heart rate values for four 16-year-old students during a training session.



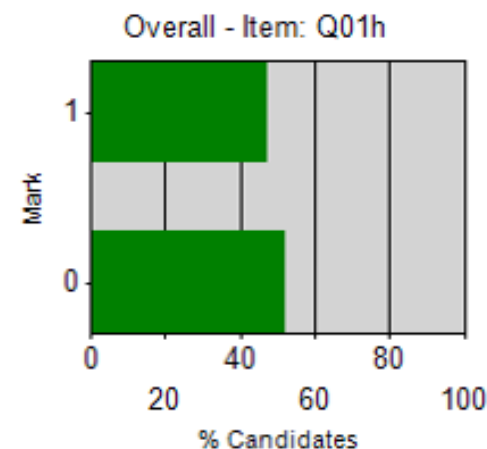
**Figure 2**

Analyse the data in **Figure 2** to determine which 16-year-old student was working in his aerobic training zone.

- ☒ **A** Student A
- ☒ **B** Student B
- ☒ **C** Student C
- ☒ **D** Student D

$$\begin{aligned} &220 - \text{age} \\ &220 - 16 = 204 \\ &20.4 \times 6 = 122.4 \\ &20.4 \times 8 = 163.2 \end{aligned}$$

Mark	No Candidates	% Candidates
0	12863	52.4%
1	11684	47.6%
Total	24547	



Use of additional  
space for planning



# What candidates did well – summary

- Questions were read carefully, often with key words underlined
- Each response was worked through to determine the most appropriate response
- Incorrect options were struck through
- All questions attempted

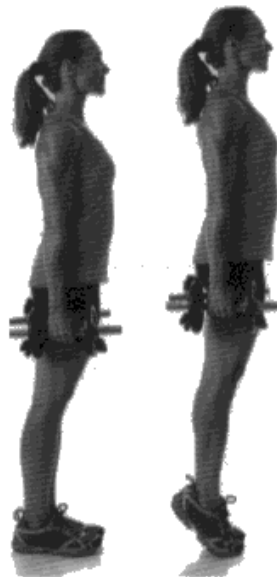


Feedback and  
variation of  
candidates'  
performance on short  
answer questions  
from paper 1 and  
paper 2



# Student response – candidate who did well

Paper 1 Q5a

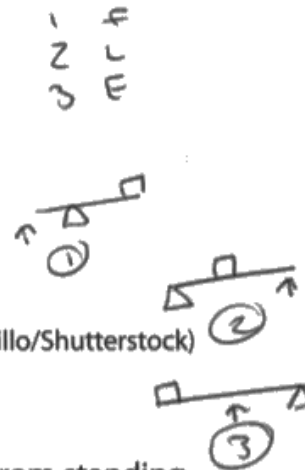


(Source: © Nicholas Piccillo/Shutterstock)

Figure 5

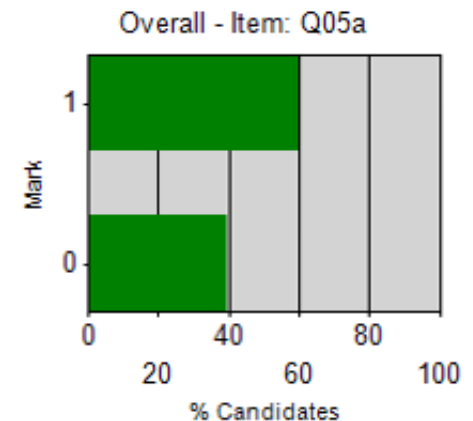
- (a) Identify the class of lever system in use when the performer moves from standing onto her toes in **Figure 5**.

second class lever



(1)

Mark	No Candidates	% Candidates
0	9782	39.8%
1	14781	60.2%
Total	24563	



Response awarded 1/1 marks



# Student response – candidate who didn't do well

## Paper 1 Q5a

- (a) Identify the class of lever system in use when the performer moves from standing onto her toes in **Figure 5**.

(1)

Lever class 3.

Response awarded 0/1 marks



# Student response – candidate who did well

## Paper 1 Q6

6 Complete the following statements about movement patterns.

(a) Movement patterns occur in body planes and around

Axis

(b) There are three main body planes: sagittal, transverse and

Frontal

(c) A tucked front somersault takes place in the sagittal plane around the

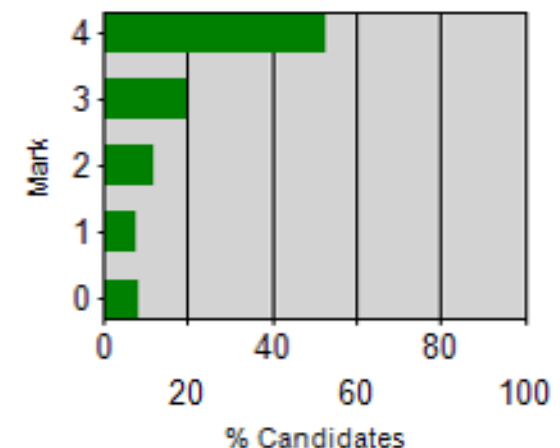
Frontal axis

(d) A full twist occurs in the transverse plane around the

vertical axis

Mark	No Candidates	% Candidates
0	1986	8.1%
1	1930	7.9%
2	2882	11.7%
3	4831	19.7%
4	12934	52.7%
Total	24563	

Overall - Item: Q06



Response awarded 4/4 marks



# Student response – candidate who didn't do well

## Paper 1 Q6

6 Complete the following statements about movement patterns.

(a) Movement patterns occur in body planes and around

axis

(b) There are three main body planes: sagittal, transverse and

vertical

(c) A tucked front somersault takes place in the sagittal plane around the

vertical axis.



(d) A full twist occurs in the transverse plane around the

horizontal axis

Response awarded 1/4 marks





# Student response – candidate who did well

## Paper 2 Q2a

2 Matilda has been training with friends to run in a marathon. This is a social health benefit for Matilda.

(a) State **two** other types of health benefit.

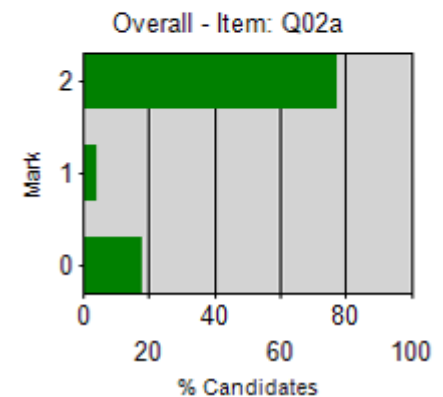
1 Emotional

2 Physical

(2)

Mark	No Candidates	% Candidates
0	3836	18.0%
1	917	4.3%
2	16586	77.7%
Total	21339	

Response awarded 2/2 marks





# Student response – candidate who didn't do well

## Paper 2 Q2a

- 2 Matilda has been training with friends to run in a marathon. This is a social health benefit for Matilda.

(a) State **two** other types of health benefit.

(2)

1 *improves fitness*

2 *prevents CHD*

Response awarded 0/2 marks



# Student response – candidate who did well

## Paper 2 Q11a

**11** A balanced diet is made up of macronutrients, micronutrients, fibre and water.

(a) Identify **two** micronutrients.

(2)

1 Vitamins - Vitamin C

2 Mineral - calcium

Response awarded 2/2 marks



# Student response – candidate who didn't do well

## Paper 2 Q11a

11 A balanced diet is made up of macronutrients, micronutrients, fibre and water.

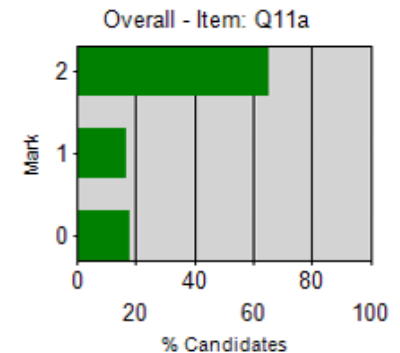
(a) Identify **two** micronutrients.

(2)

1 ..... Carbohydrates .....  
2 ..... Protein .....

Mark	No Candidates	% Candidates
0	3778	17.7%
1	3559	16.7%
2	14002	65.6%
Total	21339	

Response awarded 0/2 marks





# Why candidates did well – summary

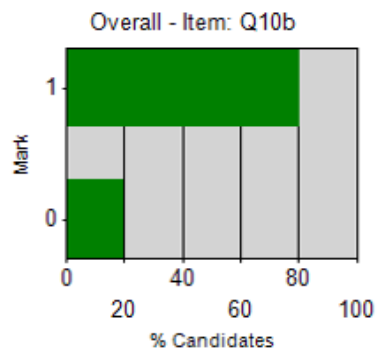
- Questions were read carefully, command words, key words or terms were underlined
- Responses provided in the question were not repeated
- The question context was used to arrive at the correct answer



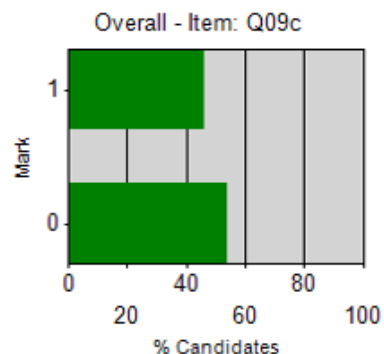
# Variation of candidate performance on short answer questions

- Rank order of accessibility of short answer questions between component 1 and component 2
- Component 1 – 10b and 11a were most accessible and 9c was least accessible
- Component 2 – 2a, 8ai and 8aii were most accessible and 11a was least accessible

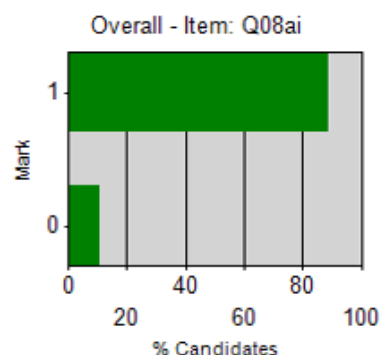
Mark	No Candidates	% Candidates
0	4872	19.8%
1	19691	80.2%
Total	24563	



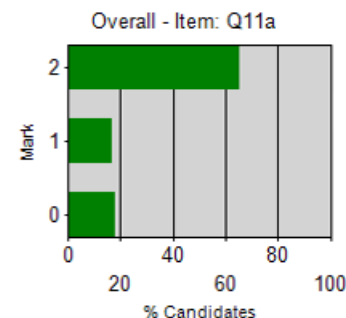
Mark	No Candidates	% Candidates
0	13204	53.8%
1	11359	46.2%
Total	24563	



Mark	No Candidates	% Candidates
0	2355	11.0%
1	18984	89.0%
Total	21339	



Mark	No Candidates	% Candidates
0	3778	17.7%
1	3559	16.7%
2	14002	65.6%
Total	21339	





Feedback and  
variation of  
candidates'  
performance on  
longer answer  
questions



# Longer questions and command words

- Longer, 3 or 4 mark questions still use a points based mark scheme
- Typical command words used are explain and describe
- Responses need to be linked
- Responses need to demonstrate development





# Student response – candidate who did well

## Paper 1 Q2a

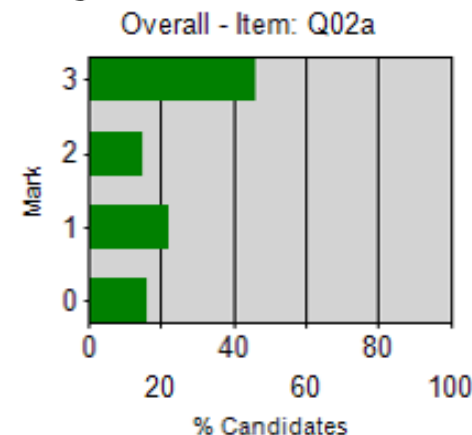
- working as pair* **Figure 3** *bicep tricep.*
- (a) Examine the antagonistic muscle action taking place at the elbow in **Figure 3** that allows the gymnast to achieve this position.

(3)

the two muscles working antagonistically in the arm  
is the Bicep and tricep.  
to achieve this position the Bicep is relaxed and  
the tricep is contracting allowing extension at  
the elbow to hold the gymnast up  
right for this position.

Response awarded 3/3 marks

Mark	No Candidates	% Candidates
0	3960	16.1%
1	5483	22.3%
2	3731	15.2%
3	11389	46.4%
Total	24563	





# Student response – candidate who didn't do well

## Paper 1 Q2a

- (a) Examine the antagonistic muscle action taking place at the elbow in **Figure 3** that allows the gymnast to achieve this position.

the bicep extends as the tricep flexes<sup>(3)</sup>  
to hold the gymnast in this position

Response awarded 0/3 marks

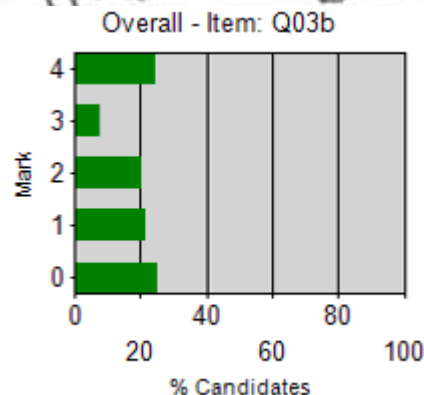


# Student response – candidate who did well

## Paper 1 Q3b

Vascular shunting is also known as the redistribution of blood flow. The blood vessels (arteries) vasodilate, which <sup>widens lumen</sup> ~~contracts the~~ and directs the blood for places in need for example the working muscles. Whereas, at the same time, the blood vessels vasoconstrict, narrowing the blood vessels which causes the blood to be directed away from places which aren't in use (digestive system) to regulate efficient blood flow.

Mark	No Candidates	% Candidates
0	6196	25.2%
1	5362	21.8%
2	5018	20.4%
3	1938	7.9%
4	6049	24.6%
<b>Total</b>	<b>24563</b>	



Response awarded 4/4 marks



# Student response – candidate who didn't do well

Paper 1 Q3b

it increases and then decreases throughout a short period of time and make the blood flow alot faster which also mean your blood is pumped more around your body

Response awarded 0/4 marks



# Delegate marking

## Paper 2 Q5

It is towards the closed part of the continuum because a tennis serve can hardly be affected by the environment and a closed skill is something that is not affected by the environment. However, it is not at the extreme end because if it is a windy day, this could potentially affect how steady the ball is ~~when the~~ in the air after it has been thrown up for a serve. Also, the presence of 3 more people on the court could be distracting for the player.

(4)

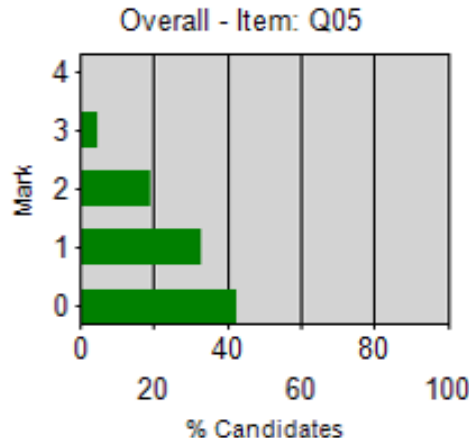


# Response analysis

## Paper 2 Q5

It is towards the closed part of the continuum because a tennis serve can hardly be affected by the environment and a closed skill is something that is not affected by the environment. However, it is not at the extreme end because if it is a windy day, this could potentially affect how steady the ball is when it is in the air after it has been thrown up for a serve. Also, the presence of 3 more people on the court could be distracting for the player.

Mark	No Candidates	% Candidates
0	9041	42.4%
1	7023	32.9%
2	4093	19.2%
3	1059	5.0%
4	123	0.6%
<b>Total</b>	<b>21339</b>	



Response awarded 3/4 marks



# Student response – candidate who didn't do well

## Paper 2 Q5

A tennis serve is arguably a closed serve because it does not rely on anybody else - the server is in almost complete control of the skill. A closed skill is a skill not affected by environmental or external factors like opponents or teammates. A tennis Forehand could be more of an open skill because it is returning an opponent's shot and requires quick thinking and could be affected by <sup>how</sup> good the opponent's shot was. A serve however is at the start of the rally so the server has time to think about it and set them selves up. They don't have as much pressure from the opponent therefore it is a more closed skill. (Total for Question 5 = 4 marks)

Response awarded 1/4 marks



# Longer answer questions summary

## **What candidates did well:**

- Knowledge was recalled and applied correctly
- Ideas expressed clearly with appropriate examples
- Higher order thinking skills demonstrated clearly by developing ideas following through points in depth

## **What candidates didn't do well:**

- Candidates did not use the correct question context
- Candidates found it difficult to develop their responses
- Many lacked application or the required analysis and evaluation





# The extended answer questions

- Levels based mark scheme
- Requires same skills as long answer questions
- Need to demonstrate development of response
- 3 marks available for each of the AO objectives –
  - A01 – recall of knowledge
  - A02 – application of knowledge
  - A03 – evaluation



# The extended answer questions – paper 1

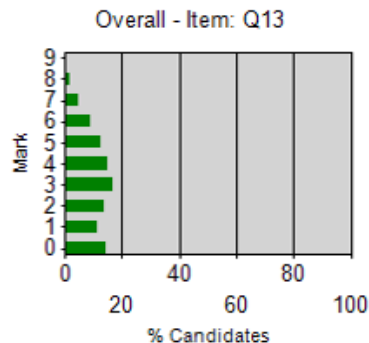
Q13. Examine the importance of the respiratory system during the different phases shown in figure 7. (9)

Q14. Evaluate the training methods causing these long term effects and their impact on Dan's shot put performance. (9)

Q13

Mark	No Candidates	% Candidates
0	3577	14.6%
1	2768	11.3%
2	3437	14.0%
3	4041	16.5%
4	3731	15.2%
5	3032	12.3%
6	2266	9.2%
7	1116	4.5%
8	463	1.9%
9	132	0.5%

Total 24563

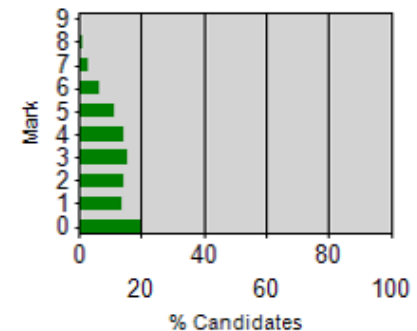


Q14

Mark	No Candidates	% Candidates
0	4901	20.0%
1	3382	13.8%
2	3559	14.5%
3	3786	15.4%
4	3518	14.3%
5	2751	11.2%
6	1620	6.6%
7	787	3.2%
8	211	0.9%
9	48	0.2%

Total 24563

Overall - Item: Q14





# Delegate marking

## Paper 1 Q13

During a serve, the movement is short and sharp and therefore is likely to be performed anaerobically, without oxygen. This is so that the tennis player can be powerful and explosive when first hitting the ball in the air, allowing a strong, accurate first hit.

~~Once a rally starts~~ Once a rally starts, the players begin to work hard for long periods of time, requiring high amounts of oxygen for efficient respiration to produce energy to hit the ball <sup>multiple times</sup> and to remove waste products like carbon dioxide from the body. This means the tennis players



# Delegate marking continued

heart rate and stroke volume will increase.  
The depth and rate of breathing become bigger to allow more oxygen to enter the body for ~~for~~ a higher respiration rate, for long period of time.  
When resting between games, the tennis player is likely to be in oxygen debt, so will carry on breathing heavier and faster than usual to repay the oxygen and remove lactic acid from the body. This allows the player to recover in between games, so he can endure long tennis game for hours, without becoming fatigued quickly.



# Delegate marking continued

Overall, the respiratory system is important in supplying large amounts of oxygen to the body and the working muscles in the tennis match, during rallies, which are continuous and intense. ~~that~~ During a serve, the need for oxygen is small and therefore, the respiratory system isn't important in aiding the body during this phase. In recovery, the respiratory system continues to work efficiently to repay the oxygen debt and removal of waste products, but after this point its importance ~~declines~~ <sup>declines</sup> as the player's heart rate and stroke volume are back to normal.



# Response analysis

## Paper 1 Q13

During a serve, the movement is short and sharp and therefore is likely to be performed anaerobically, without oxygen. This is so that the tennis player can be powerful and explosive when first hitting the ball in the air, allowing a strong, accurate first hit.

~~Once a rally starts.~~ Once a rally starts, the players begin to work hard for long periods of time, requiring high amounts of oxygen for efficient respiration to produce energy to hit the ball <sup>multiple times</sup> and to remove waste products like carbon dioxide from the body. This means the tennis players





# Response analysis continued

heart rate and stroke volume will increase.

The depth and rate of breathing become bigger to allow more oxygen to enter the body for a higher respiration rate, for long period of time.

When resting between games, the tennis player is likely to be in oxygen debt, so will carry on breathing heavier and faster than usual to repay the oxygen and remove lactic acid from the body. This allows the player to recover in between games, so he can endure long tennis game for hours, without becoming fatigued quickly.



# Response analysis continued

Overall, the respiratory system is important in supplying large amounts of oxygen to the body and the working muscles in the tennis match, during rallies, which are continuous and intense. ~~at~~ During a serve, the need for oxygen is small and therefore, the respiratory system isn't important in aiding the body during this phase. In recovery, the respiratory system continues to work efficiently to repay the oxygen debt and removal of waste products, but after this point its importance <sup>declines</sup> ~~decreases~~ as the player's heart rate and stroke volume are back to normal.

Response awarded 7/9 marks





# Student response – candidate who didn't do well

## Paper 1 Q13

When serving, the tennis player will need to put all his power into the shot.

This would not require much work from the respiratory system as the player would just need to take one deep breath to hit the ball as hard as he can.

This means that there is very little importance from the respiratory system.

During ~~on~~ a long, intense rally, the respiratory system is very important because a high amount of energy is required to continuously hit the ball. So taking breaths would be very important to allow ~~at~~ more oxygen to travel to the working muscles as quickly as possible so that they have energy to hit the ball.

When resting between games, the respiratory system is very important to allow the working muscles to replenish as much as possible so that the tennis player is able to compete to the best of his ability in the next game.

Response awarded 1/9 marks



# The extended answer questions – paper 2

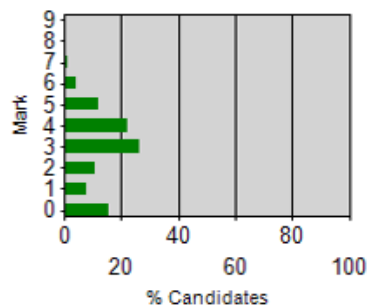
Q14. Evaluate the importance of intrinsic and extrinsic feedback for a player in an under 12 hockey team.

Q15. Discuss the impact a sedentary lifestyle can have on physical health.

Q14

Mark	No Candidates	% Candidates
0	3337	15.6%
1	1594	7.5%
2	2307	10.8%
3	5563	26.1%
4	4729	22.2%
5	2530	11.9%
6	939	4.4%
7	264	1.2%
8	73	0.3%
9	3	0.0%
Total	21339	

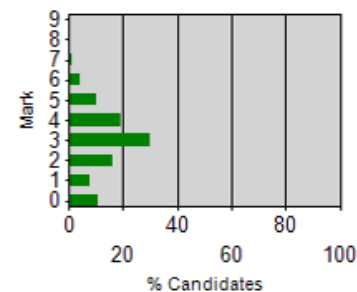
Overall - Item: Q14



Q15

Mark	No Candidates	% Candidates
0	2256	10.6%
1	1651	7.7%
2	3448	16.2%
3	6412	30.0%
4	4120	19.3%
5	2175	10.2%
6	930	4.4%
7	269	1.3%
8	63	0.3%
9	15	0.1%
Total	21339	

Overall - Item: Q15





# Delegate marking

## Paper 2 Q15

15 Discuss the impact a sedentary lifestyle can have on physical health.

(9)

A sedentary lifestyle is when a person doesn't participate in enough physical activity. This can lead to the person not burning off fat and becoming obese. This can therefore increase the chance of getting coronary heart disease, which is a build up of fat in the coronary arteries which increases blood pressure and <sup>can cause</sup> ~~affects~~ the heart, failure.

\*

Another impact of having a sedentary lifestyle is an increased chance of developing osteoporosis which is due to not participating in weight bearing activities such as weightlifting. Therefore the person's bone density is reduced and they can develop osteoporosis and fractures in bones will occur more easily.



# Delegate marking continued

Another impact of having a sedentary lifestyle is someone sat down for long periods of time which can lead to poor posture which can result in back pains that may need an operation to stop.

In conclusion a sedentary lifestyle has a negative impact on someone's physical health as it can result in <sup>obesity</sup> heart ~~fat~~ failure, <sup>and</sup> CVD, osteoporosis, back pains. This can be prevented through regular participation in physical activities such as cycling.



# Response analysis – candidate who did well

Paper 2 Q15

15 Discuss the impact a sedentary lifestyle can have on physical health.

(9)

A Sedentary life style is when a person doesn't participate in enough physical activity. This can lead to ~~the~~ someone not burning off fat and becoming obese. This can ~~too~~ therefore increase the chance of getting coronary heart disease, which is a build up of fat in the coronary arteries which increases blood pressure and <sup>can cause</sup> ~~effects like~~ heart failure.

\*

AO1 max

Another impact of having a sedentary lifestyle is an increased chance of developing osteoporosis which is due to not participating in weight bearing activities such as weightlifting. Therefore the person's bone density is reduced and they can develop osteoporosis and fractures in bones will occur more easily.



# Response analysis continued

Another impact of having a sedentary lifestyle is someone sat down for long periods of time which can lead to poor poor posture which can result in back pains that may need an operation to stop.

AO1 max again

In conclusion a sedentary lifestyle has a negative impact on someone's physical health as it can result in <sup>obesity</sup> heart failure, <sup>and</sup> CHD, osteoporosis, back pains. This can be prevented through regular participation in physical activities such as cycling.

Response awarded 5/9 marks





# Student response – candidate who didn't do well

## Paper 2 Q15

A sedentary lifestyle is a lifestyle that involves little to no physical activity.

The impact that this would have on physical health would not be good. A sedentary lifestyle would lead to many physical health risks such as, coronary heart disease, high blood pressure and type 2 diabetes.

Things like coronary heart disease would occur because of a sedentary lifestyle, all the fats that you eat would get broken down into a source of energy needed for physical activity, instead fat would just build up and eventually block the arteries, which would stop the blood flow and the heart would get less blood which in the end could be fatal.

Repeated  
point

Response awarded 2/9 marks



# Common issues on extended answer questions

- Bullet points used
- Lack of application of knowledge to the question
- Lack of analysis and evaluation of the topic
- Lack of developed responses





# A good approach to extended answer questions

Another impact of having a sedentary lifestyle is an increased  
AO1  
chance of developing osteoporosis which is due to not participating  
in weight bearing activities such as weightlifting. Therefore the  
AO2  
person's bone density is reduced and they can develop osteoporosis  
AO3  
and fractures in bones will occur more easily.



# Useful links

Edexcel Website for GCSE Physical Education

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/physical-education-2016.html>

For further support, contact the PE and Sport team:

Subject Advisor: Penny Lewis

Subject Specialist: Collette Vassell

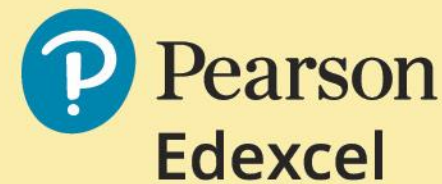
Call us: 03330 164 100

[Email and chat to us](#)

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Thanks