#### 1.1.4 Mock Examination Questions

#### **Questions**

**Q1** GCSE PE students were determined to help their parents, Janet and John, become involved in sport so that Janet and John could benefit from a healthy, active lifestyle.

Select the two most appropriate fitness tests, from those shown in Figure 6, to measure Janet's current level of cardiovascular fitness. (2)

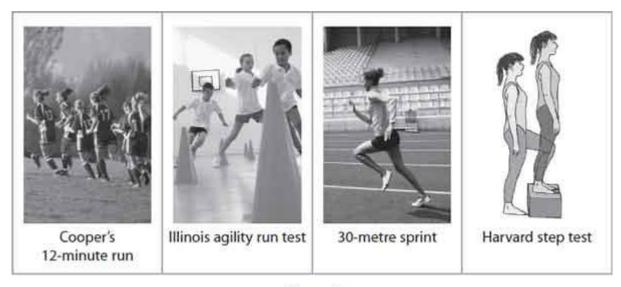


Figure 6

- i) Coopers 12 minute run
- ii) Harvard step test

Q2 Which of the following is a test of power?

A Sergeant Jump test
B Cooper's 12-minute run test
C 30-metre sprint test
D Harvard Step Test

**Q3 Which one** of the following **statements** is **false**?

A The components of the FITT principle are Frequency, Interval, Time, Type

B The FITT principle overlaps with the principle of Specificity

C Reversibility can result in a drop in fitness levels

D The principle of Individual Differences considers the needs of the individual rather than just the sport

**Q4** Imran plays for the school football team. At the start of the season the team undergo a series of fitness tests. In the table below:

State the most relevant fitness test for a football player (not goalkeeper) (1)

**Explain why** this **fitness test** is **relevant** to **Imran**. (1)

	Tick most relevant fitness test for football player	Explanation why this fitness test is relevant to football player
Illinois Agility Run	✓	
Hand grip strength test		This fitness test is the most relevant because it tests the ability to change direction with speed and control which
Standing Stork test		is required by a footballer when dribbling between defenders

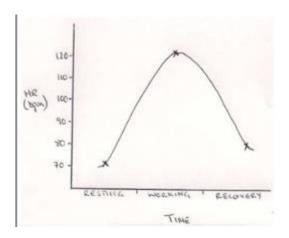
**Q5** As part of his Personal Exercise Programme (PEP) Joe measures his heart rate to check on his fitness levels.

(a) The **heart rate monitors** in **Figure 5** show three different **heart rate values**. **Re-order** these **heart rate values** and **plot** a **graph** to show Joe's **resting**, **working** and **recovery heart rate**. (2)

The plots should be ordered as;

70 for Resting heart rate
120 for Working heart rate
80 for Recovery heart rate (1 mark)

Graph should also be a **line graph** (1 mark)



(b) Explain why you have plotted the values in this order

**(1)** 

I have plotted these values in this order because resting heart rate (70 BPM) is the lowest value because it has the lowest demand for oxygen, working heart rate (120 BPM) as the highest value because it has the highest demand for oxygen and recovery rate (80 BPM) is in between value because oxygen is still required because of oxygen debt acquired during exercise

(c) **Explain why** you have **plotted** the recovery heart rate

**(1)** 

I have plotted recovery rate (80 BPM) as the in between value because oxygen is still required because of oxygen debt acquired during exercise

**Q6 Rob** and **Imran** regularly participate in physical activity. **Rob** takes part in **cross-country** runs on a regular basis. **Imran** plays for the school **football** team. Both activities require the boys to work **aerobically** and **anaerobically**. For each of the following statements, **state** whether the **activity** is **aerobic** or **anaerobic**.

- (i) Rob kept a **steady pace** for the **first mile** and a **half** of the race. (1)

  Aerobic
- (ii) At one point **near** the **end** of the **race** Rob had to **sprint** to prevent the runner behind over taking him and going into the lead.

  (1)

  Anaerobic
- (iii) During the fifth minute of the game Imran had a chance to score a goal, he struck the ball hard and gave his team an early lead.

  Anaerobic

  (1)
- (iv) In the second half of the game Imran spent a lot of time slowly jogging back into position. (1)

Aerobic

(v) Name a training method that Rob and Imran could both use for their activity (1) Fartlek or Circuit or Continuous or Interval

(v) Explain how each boy would adapt this training method to suit his own activity

Training method that	How training method would	How training method would
can be used by both	be adapted by Rob	be adapted by Imran
boys	(Cross-country runner)	(Footballer)
Fartlek	By training on different terrain (up and down hills)	By using sprints of 10 to 50 metres which is relevant in football
Continuous	By keeping at the same pace for the distance of typical races to increase cardiovascular fitness	By training continuously for 90 minutes which is the length of the game
Interval	By running up hills for one repetition	By using a range of sprint distance from 5 metres to 40 metres which is specific in football

Both boys were encouraged by their teachers to set **SMART targets** to help them **improve** their **performance** in their activities.

(i) Give two reasons why target setting could help improve performance. (2)

One reason it could help improve performance is it will motivate them. A second reason is that it will help them monitor progress

(ii) Give an example of a measureable target for Rob. (1)

One example of a measureable target is to beat his personal best (PB) by 10 seconds

**Q7** GCSE PE students were determined to help their parents, Janet and John, become involved in sport so that Janet and John could benefit from a healthy, active lifestyle.

Janet needs to select a relevant method of training to improve her cardiovascular fitness. Four different methods of training are shown in Figure 7.

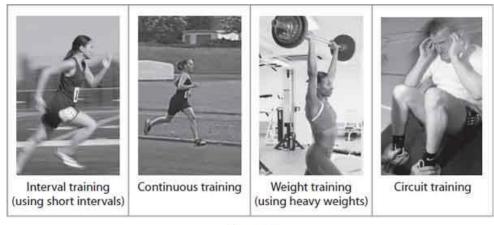


Figure 7

(i) **Identify** the **most relevant** and **least relevant method** of **training** to help Janet **improve** her **cardiovascular fitness** from Figure 7. (2)

Most relevant	Continuous training
Least relevant	Weight training using heavy weights

(ii) **Identify** a **sporting activity** where the performers would use the **training method** you **identified** as **least relevant** to Janet. (1)

#### **Shot putt**

(iii) Before returning to physical activity Janet and John should complete a PAR-Q. **What** is the **purpose** of a **PAR-Q**? (1)

The **physical activity readiness questionnaire** determines **whether** an **individual** is **safe** or **ready** to **participate** in **physical activity** 

**Q8**\* Eshan is inspired by performers in the run up to the London 2012 Olympic and Paralympic Games, and is determined to improve his performance. He decides to set **SMART targets** as a first step to achieving his long-term goal.

**Discuss** the **use** of **target setting** to **improve performance**. You must make reference to **examples** in your answer. (6)

Plan

**GOAL SETTING** can achieve this by;

1. Increasing **FOCUS** 

2. Increasing MOTIVATION

MENTALLY PREPARE athletes for the target
 Providing INDICATION of PROGRESS

#### Describe, explain and apply the principles of setting **SMART** targets

- SPECIFIC; this is when the goals are CLEAR and to the POINT (I want to jump 4 METRES in the long jump)
- MEASURABLE; this is to measure your RESULTS and IDENTIFY PROGRESS (I will measure my jumps each week to see if I am IMPORVING)
- ACHIEVABLE; this is when the goals are CHALLENGING but REACHABLE (I jumped 3 METRES 90 CMS
  last season so this difference is a challenge but I could do it)
- REALISTIC; this is MANAGEABLE to my LEVEL of ABILITY (I could jump 3 METRES 90 CMS in YEAR 10 so this is within my ABILITY now that I am in Y11)
- TIME-BOUND; this is when you state a specific START DATE and a specific END DATE when you hope to achieve the goal (I will start my programme on 1<sup>st</sup> May and I want to reach my goal in 2 MONTHS the 30<sup>th</sup> June)

One use of target setting to improve performance is setting specific goals. This is setting goals that are clear so the performer knows what they are trying to achieve. An example is in the 100m by trying to improve your start which is important to increase your focus and concentration whereas a non-specific goal would be too vague and lack clarity for the individual leading to limited improvement.

A second use is setting measurable goals. This is so you can quantify or measure your specific goal. An example is in the 100m is reducing your time from 11 seconds to 10.9 seconds which is important to clearly see when you have achieved it and it also increases focus and motivation whereas with a non-measurable goal you would be unaware if you had achieved it.

A third use is setting achievable goals. This is setting goals that are possible to attain or complete. An example is setting the completion of a marathon when the individual suffers from chronic knee joint pain as this may not be achievable and lead to a lack of motivation whereas with an achievable goal the individual is motivated to achieve it

A fourth use is setting realistic goals. This is setting goals that are challenging but not too hard. An example is a footballer setting the goal of scoring 12 goals in a season when last season they scored 10 whereas a footballer who sets 30 goals is being unrealistic which will lead to increased stress levels and demotivation

A fifth use is setting time bound goals. This is setting goals that have clear start and end dates. An example is the same footballer who uses the start and end of the season to reference the progress that they have made whereas a footballer who doesn't use the seasons will not have been able to measure the rate of progress which can lead to a lack of focus and concentration.

#### **Total Marks 30**

#### Mark Scheme

## **Q1**.

Answer		Additional Guidance	Marks	Total
Description of benefit	Category of benefit			
Any one description related to response stated in question  In question Walk rather than bus Description Accept specific relevant health benefit, e.g. could lead to weight loss if overweight OR Accept specific relevant fitness benefit, e.g. increase cardiovascular fitness OR increase muscular endurance OR decrease resting heart rate	If first column blank no credit for classification.  Physical (1) (if matches description)	Do not accept one word or vague answers e.g. improves health; improves body shape; improves body composition  Do not accept Cardiovascular system	1×2	2
In question Play sport as break from revision Description Will relieve stress (1)	Mental (1) (if matches description)	Do not accept mental break; Psychological; relax; mind off troubles.	1 × 2	2
In question Ran on own now run in a club Description A chance to socialise OR To make new friends OR To meet friends Increased self-confidence as more friends now joined a club	Social (1) (if matches description)  OR  Mental (1) (if matches description)	Do not accept socialise in column 2 Competition cooperation	1 × 2	2
		Total for	Question 2	6

#### **Q2.**

Answer	Mark
1. Working against an opponent/trying to beat personal best/equiv / trying to win / trying to be the best NB Do not award if reference to standard of competition Do not allow goal setting / targets /	(1)

personal challenge /	
playing a match unless	
qualified $(1 \times 1)$	

## Q3.

Answer	Mark
<ol> <li>Working with a team/in a team / others / teamwork</li> <li>to achieve common goal/equiv Do not allow any reference to social / friends / helps you cooperate (1 × 1)</li> </ol>	(1)

## Q4.

Answer	Mark
Accept any two from the following (max one/line)  1. Work body to limit / push yourself harder  2. Because you are working physically hard you need to be mentally tough to keep going/keep motivated/equiv  3. E.g. Not wanting to give up in marathon even though body is tired/Scared of abseiling but overcome fear and complete activity Do not accept target setting (2 × 1)	(2)

# Q5.

Answer	Mark
<b>B</b> An increase in serotonin	(1)

Answer	Mark
Q - a physical and mental benefit of a healthy, active lifestyle <b>C</b> - (Physical challenge)	(1)

# Q7.

Answer	Mark
Any one of following:  1. Improve fitness (eg increased strength / increased muscular endurance)  2. Accept any fitness adaptation – e.g drop in resting heart rate / cardiac hypertrophy  3. Accept any possible physical health gain – e.g reduction in risk of osteoporosis / weight loss if overweight Accept any regular or long-term effects identified in Q15. Do not accept mental / social benefits (1 × 1)	(1)

#### Q8.

Answer	Mark
Q - a socio-economic key influence that can impact on achieving sustained involvement in physical	
activity <b>D</b> – (Cost)	(1)

Answer	Mark
Accept any two from the	
following (max one/line)	
1. Programmes are	
concerned with	
participation/getting	
more involved in sport /	
providing more	
opportunities	
2. This can be a physical	
health benefit (allow	
appropriate example:	
drop in resting blood	
pressure; reduction in	
cholesterol / reduction in	
obesity)	
3. Mental benefit(allow	
appropriate example:	
increased serotonin	
therefore 'feel good'; fun	
/ increase self-esteem)	
4. Social benefit (allow	
appropriate example:	
social mixing)	
5. Accept reference to	
five-a-day / improving	
diet /	
6. Educated about diet /	
reference to raising	
awareness of healthy	
lifestyle Do not accept	
simple statements, e.g.	
increased fitness /	
balanced diet / regular	
exercise as question asks	
for explanation Do not	
credit descriptions of	
initiatives $(2 \times 1)$	(2)

## Q10.

Answer	Mark
С	
Resources	(1)

Answer	Do not accept	Additio nal Guidan ce	Marks	Total
Any three differen t roles in any order  maximu m one from each point:  Lead ership OR coach OR leader OR captain  Volunte ering OR specific volunte er role (e.g. first aider)  Official OR referee OR umpire OR judge	Partici pation Teacher Phys io; Organis er Volunta ry Fundrai ser 'Refing'	Accept any specific role, e.g. manage r (pt 1); Secreta ry (pt 2); Timeke eper (pt 3); Point 3: Accept helper if linked with role e.g. helps with organis ation of the club.	3×1	SO CONTRACTOR OF THE PROPERTY

# Q12.

Foundat	Anythin	First	1×1	1
ion	g else	answer		
		only		

Answer	Mark
Performance, Elite, Professional, Excellence Do not accept Performer,	
Performs, Performing, Participant, Semi-pro	(1)

# Q14.

	A	nswer		Do not accept	Additional Guidance	Marks	Total
i	to	n explanation that b: the ability to meet to be environment			Does not need to be word for word definition	1×1	1
ii		Two points from any one numbered row Point 1 accept other					
		Fitness can improve health (1)	By reducing cholesterol (1)		specific health benefits e.g. drop in blood pressure.		
		2 Fitness can decrease health (1)	Through overuse injuries Through drop immune system (1)		Can achieve second listed point in row without first		
	12	Without healthy lifestyle fitness will drop (1) Accept converse	Poor diet therefore no energy to maintain fitness (1)			1×2	2
	2	Cannot increase/m aintain fitness without healthy lifestyle (1)	As without regular exercise fitness will not improve (1)				

## Q15.

Answer	Mark
Q - would be most important to a rower 8 minutes into a 12 minute race <b>B</b> - (Muscular	
endurance)	(1)

#### Q16.

Answer	Mark
С	
Power	(1)

#### Q17.

Answer					Ma
Only credit eac	credit each component once				
	Long Distance Runn	er	Sprinter		
Component used by performer	Cardiovascular fitness/Muscular end CV / stamina if given		Power/Strength		
Component used by performer	Cardiovascular fitnes endurance (accept ( given)		Power/Strength		
How one of components is used by performer	CV Maintain pace/ allows them to run long distances without tiring / oxygen delivery/CO2 removal	ME  Repeated muscle contractions to maintain performance/speed / work muscles for a long time without tiring	Power  For effective / good start/ leave blocks quickly / generate force to move quickly/ run faster  Do not accept answers related to energy	Strength  Combine with speed to provide power/ equiv / push off blocks harder	
	incorrect, no access to on does not match fir	o explanation st choice, no credit given.		(6 × 1)	

## Q18.

	Answer	Do not accept	Additional Guidance	Marks	Total
	Any three of the following components from:  Power Speed Balance Coordination	Anything else	Accept - Phonetic spelling:  Responses in any order:  FIRST response per line.	3×1	3
-			201-01-02-02-02-02-02-02-02-02-02-02-02-02-02-	Question 3	3

#### Q19.

	1. Harvard step test 2. Cooper' s 12-min ute run	Any order Point 2: Accept 12 min Cooper run; Cooper run	2×1	2
--	--	---	-----	---

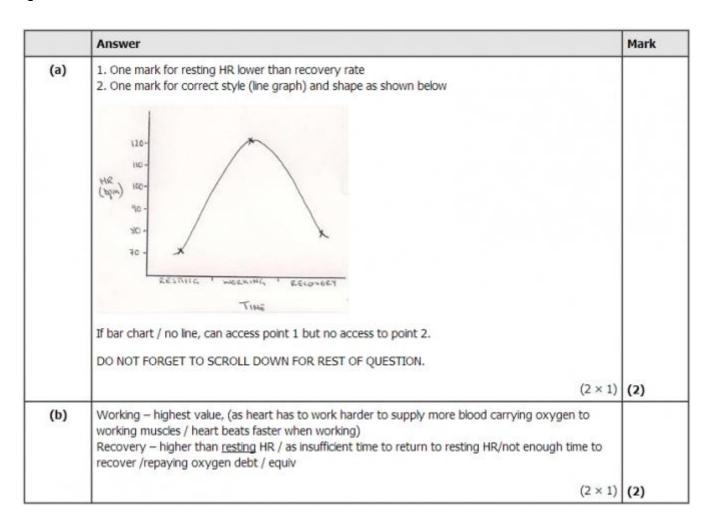
# Q20.

Answer	Mark
A Sergeant Jump test	(1)

## Q21.

	Tick most relevant fitness test for football player	Explanation why fitness test is relevant to football player	
Ilinois Agility Run	~	Measures fitness that is used in game (e.g have to change direction quickly to beat opponent)/ equiv	
Hand grip strength test		Accept reasons why others not valid, e.g.     components not used as much in game	
Standing Stork test			

#### Q22.



#### Q23.

	Answer	Mark
(i) (ii) (iii) (iv)	Aerobic / Aerobically Anaerobic / Anaerobically Anaerobic / Anaerobically Aerobic / Aerobically (4 × 1)	(4)

#### Q24.

i	Most relevant: Continuous training	Any other training method		1×1	
	Least relevant: Weight training (using heavy weights)	Any other training method, e.g. resistance	Accept weight training; weights	1×1	2
īi	Any relevant activity/performer based on candidate selected method of training in (gi), e.g. weight lifting if weight training selected.		Activity selected in (i) MUST relate to training method selected in (i)	1×1	1

#### Q25.

Training Method	Cross-country runner  How training method would be adapted by Rob	Footballer  How training method would be adapted by Imran
The state of the s		
that can be used by both boys		osupces by arrivin
Accept any: Interval Continuous Fartlek Circuit Weight Cross Do not accept Cooper run	How training method implemented by long distance runner eg if fartlek – running over different terrains  Identifies specific components of fitness required in activity eg circuit includes exercises for muscular endurance	How training method implemented by footballer eg if fartlek – focus on change of pace  Identifies specific components of fitness required in activity eg circuit includes exercises for muscular strength
	Accept specific examples of training sessions eg if weight training, high reps, low weights.	Accept specific examples of training sessions eg if weight training, low reps, high weights

#### Q26.

Any <b>o</b> i from Cho king partici	ec goals How fit	Accept referenc e to safe to exercise or	1×1	1
--	---------------------	--	-----	---

ants are	are/phy	medical	
healthy	sical	conditio	
enough	readine	ns	
to start	ss Their		
physical	ability		
activity	<b>,</b>		
OR			
□ То			
establis			
h a			
baseline			
of			
intensit			
y for			
physical			
work			

	Answer	Mark
(i)	Any two from:  1. Motivates therefore likely to continue to train / push / makes them work harder / reduces boredom / task persistence / challenge yourself / increase self-esteem when achieved.  2. Gives clear/specific goals / aims to achieve so once achieved can aim higher / gives focus / something to work towards  3. Allows them to monitor progress / analyse progress / decrease stress / know that you have improved  4. Encourages training to be planned/structured to achieve targets so therefore more effective training Do not accept improves performance unless qualified (2 × 1)	(2)
(ii)	Credit any appropriate example, e.g. beat PB by 10 seconds/ complete race within 25 min/equiv NB. Need to consider individual candidate response as alternative acceptable answers could be given based on distance of race NB Needs numbers/ equivalent NB Accept answers relating to Imran Do not accept measure how fast he can run	(1)

# Answer A discussion of the use of target setting to improve performance that makes reference to:

The individual principles of SMART targets: (all correctly listed = simple statement)

Specific, Measurable, Achievable, Realistic, Time-bound

2. A brief description of the individual principles of SMART:

(simple statements unless linked to examples/performance) Specific, goals clear so performer knows what they are trying to achieve

Measurable, quantifying aim

Achievable, make sure the target is realistic, i.e. it is possible for the performer to complete

Realistic, making the target challenging but not too hard

Time-bound, you should have completion dates for targets

3. Examples of the application of the principles of SMART targets:

(first half simple statement; whole statement - developed)

Specific, work on weakness x to give my training appropriate focus for improvement

Measurable, improve 100m sprint time by 100th sec so clear to see when I achieve

Achievable, if I can already clear 2m setting a target of 2.1m should ultimately be achievable so motivates me to continue (must have current and future value to gauge if 'achievable')

Realistic, if I normally score 1 rounder per game increasing to 2 would be realistic, but 6 would not and would be demotivating Time-bound, I will achieve this goal by May 2012 so I check I am progressing at the right rate and alter target or set new one to continue improving

 Makes reference to the value of the use of target setting to improve performance: (first half simple statement; whole statement - developed)

TS provides focus - so work on what is relevant leading to improvement

TS allows you to measure progress so you can monitor effectiveness of training programme -and change if not getting results required

TS increases motivation -so more likely to maintain training and continue to improve

TS can decrease stress on the performer as only small target or stepsfocused on in order to achieve harder long term goal

TS gives a framework to build on, progressing and setting new targets each time an old target is achieved-so you are continually working to improve

TS Can hinder if poorly set targets as they will not be achieved -and lead to demotivation/dropping out therefore drop in performance

5. Concludes value based on discussion points raised

Level	Mark	Descriptor(Question 12)
Level 0	0	No rewardable material
Level 1	1-2	<ul> <li>i) A number of simple statements identifying the principles of SMART targets. E.g. targets should be specific; measureable; can be motivating; give you an aim</li> </ul>
		ii) A number of <b>simple statements</b> identifying examples. E,g, measureable for example improve my sprint time by 1/10 <sup>th</sup> of a second
		Candidates will produce brief and narrative responses, making a limited number of simple statements, probably with limited reference to the question. Little knowledge and understanding of the principles or values of target setting. Responses produced by candidates will be mostly generalised, and may not fully address the requirement of the question to discuss the use of target setting to improve performance
		Candidates' writing communicates ideas using everyday language, but lacks clarity and organisation. There will be frequent errors in candidates' spelling, grammar and punctuation.
Level 2	3-4	<ul> <li>i) Developed statements, i.e. simple statements with explanation or additional information (linking principle with value).</li> <li>E.g. a measureable target will give the performer something to aim for so they keep trying to achieve this aim</li> </ul>
		ii) Developed statements will provide <b>examples</b> from physical activity to support responses and illustrate impact on performance.
		ii) Basic (but accurate) conclusion in line with previous points.
		Candidates' responses will be mostly accurate and include relevant factual material. Some knowledge and understanding of target setting. Candidates will have addressed the requirement of the question to discuss the use of target setting to improve performance with some success. Candidates' writing communicates ideas with accurate use of appropriate terminology, and the organisation of the response shows some direction and control. There will be few errors in spelling, punctuation and grammar.
Level 3	5-6	i) Developed statements (using relevant examples) balanced and succinct.
		ii) Conclusion provided based on points raised
		Candidates will offer factually accurate and sustained responses that relate well to the focus of the question and successfully addresses the discursive demands. Sound knowledge and understanding of SMART targets and their value. The discussion will be supported by accurate factual material that is relevant to the question. The value of goal setting in improving performance will be fully discussed with appropriate conclusions reached.  Candidates' writing communicates ideas effectively using appropriate terminology, and organises material clearly and coherently. Spelling, punctuation and grammar will be accurate throughout the response.

#### Q29.

Answer	Mark
Q - Which of the following	
statements is false? A -	
(The components of the	
FITT principle are	
Frequency, Interval,	
Time, Type)	(1)