

Mark Scheme (Results)

Summer 2014

Pearson Edexcel GCSE in Physical Education (5PE03) Paper 1

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5PE03/01 – June 2014 mark scheme

Section A: Computer Marked

Question Number	Answer	Mark
1	D Cooperation	1
Question Number	Answer	Mark
2	D Prevention of stress-related illness	1
Question Number	Answer	Mark
3	C Drop in resting heart rate	1
Question Number	Answer	Mark
4	D Family, fashion, race, access, illness, cost	1
Question Number	Answer	Mark
5	B A form of physical activity to maintain or improve health and/or fitness	1
Question Number	Answer	Mark
6	C Circuit	1
Question Number	Answer	Mark
7	C Interval	1
Question Number	Answer	Mark
8	C Illinois agility run test	1
Question Number	Answer	Mark
9	B Standing broad jump	1
Question Number	Answer	Mark

Question Number	Answer	Mark
10	A Recovery heart rate	1
Question Number	Answer	Mark
11	A To see how long it takes for heart rate to return to starting heart rate to establish if training is improving fitness	1
Question Number	Answer	Mark
12	D Graph D	1
Question Number	Answer	Mark
13	C Graph C	1
Question Number	Answer	Mark
14	A Aids digestion	1
Question Number	Answer	Mark
15	D Prevents deficiency diseases	1
Question Number	Answer	Mark
16	C A process to ensure an appropriate supply of blood reaches the muscles during exercise	1

Section B: ePEN Marking

Questio	n Answer	Do not accept	Additional Guidance	Mark s	Total
17 (a)	Any correctly identified NGB /International governing body (e.g. FIFA/EUFA) Credit standard abbreviation of NGB's or written in full. e.g: FA (Football Association) WRU (Welsh Rugby Union) RFU (Rugby Union - England) Useful website of NGB's: http://www.sportengland.org/our-work/national-work/national-work/national-governing-bodies/sports-that-we-recognise/	Initiatives, eg PESCL Sport England or other Institutes of sport Youth Sports Trust	Use website to check candidate response if NGB not known to you Accept 'British' rather than 'English' provided the rest of the name of the NGB is correct. (E.g. British TT association).	(1x1)	(1)
17 (b)	Description from two of the following: 1. Increase participation /get people to participate (1) to improve health/fitness/have a healthy lifestyle OR with a focus on priority groups (1) OR 2. Retain people in sport (1) for health/fitness OR through club links/ Better facilities/ through a variety of different roles (1) OR 3. Increase sporting success of country /more medals (1) by developing talent/	Examples not linked to physical activity e.g. healthy eating. Pt3. Better facilities	For this question, can achieve marks across points on m/s. as they are interchangeable, e.g. developing talent can lead to increased participation. Max 2 marks per purpose. NB Any reference to increasing health/fitness should be credited. Only credit reference	2x2	(4)

talented performers produce more elite performers (1)	to health/fitness once	
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stio	Answer		Do not accept	Additional Guidance	Mar ks	To tal
	order: 1. Cardiovascular fitness/ Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aerobic fitness 2. Muscular/Muscle		Other components of health related exercise The word 'Cardiovascula r' without reference to fitness or endurance	Pt. 1 Only 1 mark available for options.	2x1	(2)
(i)	Flexibility Accept phonetic spelling		Suppleness		1x1	(1)
)	The answer in (bii) ranswer in (bi). Only	ement nust b accep	for (bii) - see to e the correct fito t the stated fito	ness test for the ess test(s) for the		
	Answer in (bi) Flexibility (Muscular) strength Cardiovascular fitness/cardiovasc ular endurance/aerobic endurance/equiv Muscular endurance Body composition	Sit an 1RM/ 12 mi test/N test/F NB- A e.g.1.	nd reach (flexibiling rip dynamomet in cooper run/HamsFT/Multi-stage forestry step testaccept any comme 2 min run/Coope	ty test) er/hand grip test ervard step e fitness test/treadmill t enon names of test er's test/Bleep test	1x1	(1)
	(i)	Two of the following in order: 1. Cardiovascular fits Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aer fitness 2. Muscular/Muscle endurance (i) Flexibility Accept phonetic spelling (ii NB - do not 'mark' (shown to allow judge) The answer in (bi). Only identified component below. Answer in (bi) Flexibility (Muscular) strength Cardiovascular fitness/cardiovascular endurance/aerobic endurance/equiv Muscular	Two of the following in any order: 1. Cardiovascular fitness/ Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aerobic fitness 2. Muscular/Muscle endurance (i) Flexibility Accept phonetic spelling (ii NB - do not 'mark' (bi) this shown to allow judgement The answer in (bii) must be answer in (bi). Only accept identified component of he below. Answer in (bi) Required Sit are (Muscular) strength Cardiovascular fitness/cardiovasc ular fitness/cardiovasc ular endurance/aerobic endurance/equiv e.g.1.1 Muscular 1 min	Two of the following in any order: 1. Cardiovascular fitness/ Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aerobic fitness 2. Muscular/Muscle endurance endurance (i) Flexibility Accept phonetic spelling (ii) NB – do not 'mark' (bi) this has already be shown to allow judgement for (bii) – see to the stated fitnes identified component of health-related fitnes below. Answer in (bi) Required answer for fitness/cardiovascular fitness/cardiovascular fitness/cardiovascular fitness/cardiovascular fitness/cardiovascular endurance/equiv e.g.12 min run/Cooper Muscular 1 minute press-up/sit	Two of the following in any order: 1. Cardiovascular fitness/ Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aerobic fitness or endurance endurance (i) Flexibility Accept phonetic spelling (ii) NB - do not 'mark' (bi) this has already been marked it is only shown to allow judgement for (bii) - see table below The answer in (bi) NB endurance The word 'Cardiovascular' without reference to fitness or endurance endurance (ii) Flexibility Suppleness Accept phonetic spelling NB - do not 'mark' (bi) this has already been marked it is only shown to allow judgement for (bii) - see table below The answer in (bii) must be the correct fitness test for the answer in (bi). Only accept the stated fitness test(s) for the identified component of health-related fitness given in the table below. Answer in (bi) Required answer for (bii) to match (bi) Flexibility Sit and reach (flexibility test) (Muscular) strength Cardiovascular fitness/cardiovasc ular endurance/aerobic endurance/equiv Muscular 1 minute press-up/sit-up test	Two of the following in any order: Other components 1. Cardiovascular fitness/ Cardiovascular endurance/CV fitness/stamina OR Aerobic endurance/aerobic fitness 1. Muscular/Muscle endurance endurance endurance endurance (i) Flexibility Accept phonetic spelling NB - do not 'mark' (bi) this has already been marked it is only shown to allow judgement for (bii) - see table below The answer in (bii) must be the correct fitness test for the answer in (bi). Only accept the stated fitness given in the table below. Answer in (bi) Required answer for (bii) to match (bi) Flexibility (Muscular) 1RM/grip dynamometer/hand grip test strength Cardiovascular fitness/cardiovasc ular endurance/aerobic endurance/equiv e.g.12 min run/Cooper's test/Bleep test Muscular 1 minute press-up/sit-up test

Question	Answer	Do not accept	Additional Guidance	Mark s	Total
18 (c)	Explanation from ONE of the following: 1. Using a specific target (1) will mean they focus on area for improvement/weaknes s/relevant aim (1) therefore improvement is more likely leading to motivation (1) 2. By setting a measureable goal (1) they can see progress / monitor progress (1) knowing their training is working/ improving will motivate them to continue with it. (1) 3. Ensuring target is achievable/realistic (1) so they know they can complete it/they have access to facilities/time (1) which motivates them to continue to train/work hard (1) 4. Make time bound/time based (1) so there is a definite point when the target must be achieved (1) therefore makes them motivated to work hard to achieve within time frame/keeps training interesting/ challenging as won't get bored with same target as set new target once completed/won't put off training (1)	Points 2 – 3 – marking points are hierarchical, cannot achieve marking point 3 without marking point 2. Pt 5 – do not accept 'time' on own as principle	Must be developed explanation relating to ONE aspect of SMART Response requires correctly identified principle to base explanation on however if obvious can still credit explanation even if principle not credited, e.g. measure, time frame. Credit reference to any of the SMART principles for max 1 mark. Pt. 3 Accept reference to not being demotivated instead of motivated	1x3	(3)

Que	stion	Answer	Do not accept	Additional Guidance	Mark s	Total
19	(ai)	To avoid being tackled by opponent/to get past opponent/sidestep/to change his direction quickly		Accept any response indicating getting past the opponent, e.g. to dodge opponent; outmanoeuv re opponent	1x1	(1)
19	(aii)	1.To maintain/keep centre of gravity (mass over base of support) 2.To stop from falling forward (when defending) 3.To maintain/keep/remain in/hold/stabilise/stay in defensive position/to allow you to maintain position when trying to make yourself as tall as possible to block shot	Reference to player with the ball	Must relate to maintaining position or preventing falling	1x1	(1)

Qu	Answer	Do not accept	Additional Guidance	Mark s	Total
19b	Any two explanations that describe what the component is used for and an example of its application from: 1. Power – for height/acceleration/force (1) to intercept cross/make shot more difficult to save (1) Accept other relevant explanations E.g. to kick the ball a long way/hard shot (1) to clear the ball and get the team out of trouble/more likely to score a goal (1) 2. Reaction time – shots can be deflected (1) therefore need to be able to adjust position quickly to save the shot (1) Accept other relevant explanations eg to make quick decisions (1) so opponent has less time to take the ball from you (1) 3. Speed – for pace in game (1) therefore get in space for pass/to lose marker (1) Accept other relevant explanations eg get past opponent/be first to collect loose ball (1) to allow counter-attack/gain possession (1) OR catch up attacker (1) to prevent them from scoring (1) 4. Coordination – credit example that uses more than one body part e.g. hand/eye (1) so that the racket makes correct contact with shuttle so effective shot/to improve their technique/correct technique/increase accuracy/control (1)	Agility Balance Responses that are not linked to 'games' activities. Responses explaining the importance of health-related exercise Definitions Pt 3 – do not credit a simple repeat of the term, e.g. need to react quick to the game	No credit for naming component Accept responses linked to other games activities Answers can be for the same game or different games, but only credit each component once. To gain two marks the second point must be a development of the first point. If more than one component of fitness is listed for each explanation use first answer only.	2x2	(4)

Accept other relevant explanations, e.g. a description of the use of		
two or more body parts – (1) and impact of this (1)		

Question		Answer
20		A discussion of the application of the principles of training to improve
		fitness that makes reference to:

Indicative content

To progress through the levels there needs to be evidence of the ability to write coherent discussion points that relate to the question. These points could take a variety of forms but should be linked and show progression of an argument/point **that links application of the principles of training to an increase in fitness.**

NB - Question asks how 'this' improves fitness therefore developed statements must link to fitness

A - Identify principles of training with definition/description (example simple statements)

- List of principles (no description)/acronyms, e.g. RIPS, SPORT, FITT (S)
- Progressive overload gradually increasing intensity of workload (S)
- Specificity focusing training on the needs of the activity/relevant area of fitness (S)
- Individual differences/needs personalised training plan (S) (accept personalisation in relation to age, gender, fitness levels, sport)
- Rest and recovery allowing time between training sessions for sufficient rest and for adaptations to take place (S)
- FITT represents frequency; intensity; time; type (S)
- Frequency means how often you train (S)
- Reversibility means that if you decrease level of exercise your level of fitness will drop (S)

B – Identify principles of training with examples (example simple statements) then linked to fitness (developed)

- Progressive overload starting at 5KG and increasing to 6KG once 5KG becomes too easy (S) in this way the muscles adapt to the new work loads increasing the strength of the student (D)
- Specificity the sprinters in the class use short rest intervals and work anaerobically compared to the long distance runners in the group (S) this would mean each type of performer was improving a relevant aspect of fitness for their activity (D)
- Individual differences/needs Jo lifts 15KG compared to Mike's 25KG as she isn't as strong as Mike (S) if she lifted as much as Mike before she had increased her fitness she would injure herself and lose fitness as not able to train (D)
- Rest and recovery have training sessions on alternate days (S) so that the body has time to replenish energy stores so it can train again and begin to adapt (D)

C – Effectively applied: (example developed statements where principles and their description linked to explanation of how they could be applied.)

- Progressive overload by increasing workload slightly minimises risk of injury
 (S) therefore the body can continue to train without fear of needing to stop due to injury.
- Progressive overload gradually increasing the intensity of workload (S)

- causing the body to adapt, increasing fitness (DS)
- If injured due to overuse through not applying progressive overload (S) means you have to reduce training therefore losing fitness through reversibility (D).
- FITT represents frequency; intensity; time; type if the class start with two exercise sessions a week and then increase this to three they will have increased frequency (S) of training therefore their bodies will adapt to the new level of training making them fitter. (D)

Level	Mark	Descriptor
Level 0	0	No rewardable material
Level 1	1-2	i) A number of simple statements that comment on the principles of training E.g. Progressive overload - gradually increasing intensity of workload
		ii) A number of simple statements that give examples to describe the principles of training. E.g. Progressive overload - starting at 5KG and increasing to 6KG once 5KG becomes too easy
		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 range of requirements. Responses produced by candidates will be mostly generalised, and may not fully address the requirement of the question.
		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	i) Developed statements, i.e. simple statements with description and example of principles of training that, if used effectively would improve fitness. E.g. Individual differences/needs - focusing training on needs of individual - Jo lifts 15KG compared to Mike's 25KG as she isn't as strong as Mike.
		ii) Developed statements , i.e. simple statements with explanation of how principle should be applied to bring about improvement in fitness.
		iii) 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 the application of the principles of training. Candidates will have addressed the requirement of the question to discuss the use of the principles of training to improve fitness 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 the principles of training and their application. The discussion will be supported by accurate factual material that is relevant to the question. The majority of the specification principles of training 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.

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