
Mark Scheme

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

Mark Scheme

Question Number	Answer	Mark
1	Frequency	(1)

Question Number	Answer	Mark
2	Flexibility	(1)

Question Number	Answer	Mark
3	<p>Award one mark for each correct answer:</p> <p>Progressive overload (1) occurs when training is demanding enough to cause the body to adapt, improving performance</p> <p>Reversibility (1) will happen if training stops or training is not sufficient to cause adaptation</p>	(2)

Question Number	Answer	Mark
4(a)	Core exercises	(1)

Question Number	Answer	Mark
4(b)	<p>Award one mark for a correct example.</p> <ul style="list-style-type: none"> • Biceps curl (1) • Squats (1) <p>Accept any other appropriate answer.</p>	(1)

Question Number	Answer	Mark
5(a)	<p>Award one mark for correct formula</p> <p>Award one mark for correct substitution</p> <p>Award one mark for correct answer</p> <p>BMI = W / H^2 (1)</p> <p>$H^2 = (1.74 \times 1.74) = 3.0276$</p> <p>$W / 3.0276$ (1)</p> <p>= 27.08 (1)</p>	(3)

Question Number	Answer	Mark
5(b)	(Malcolm's result suggests he is) overweight.	(1)

Question Number	Answer	Mark
6(a)	6-20 Rating of Perceived Exertion Scale	(1)

Question Number	Answer	Mark
6(b)	Award one mark for both correct answers. 14 to 18	(1)

Question Number	Answer	Mark
7	Award one mark for each correct answer. Photo A – Passive (1) Photo B – Active (1)	(2)

Question Number	Answer	Mark
8(a)	20 reps	(1)

Question Number	Answer	Mark
8(b)	Award one mark for each correct answer: <ul style="list-style-type: none"> • 75% 1RM (1) • 12 reps (1) 	(2)

Question Number	Answer	Mark
9(a)	Award one mark for each correct answer: <ul style="list-style-type: none"> • Right hand (1) • Right foot (1) 	(2)

Question Number	Answer	Mark
9(b)	Award one mark for each point, up to a maximum of three marks: <p>Fat Free Mass (bone, muscle, everything that is not fat) lets the current through (1) whereas fat mass does not let current through so well (impedance) (1), therefore, the higher the resistance, the higher the percent body fat of the individual (1)</p> <p>Accept any other appropriate answers</p>	(3)

Question Number	Answer	Additional Guidance	Mark
10	Proprioceptive Neuromuscular Facilitation (technique) Accept any other appropriate phonetic spellings	Accept PNF Do not accept 'Flexibility'	(1)

Question Number	Answer	Mark
11(a)	Continuous training	(1)

Question Number	Answer	Mark
11(b)	Fartlek (training) Accept 'Fartlek'	(1)

Question Number	Answer	Mark
12(a)	195 bpm	(1)

Question Number	Answer	Mark
12(b)	Award one mark for each correct answer: <ul style="list-style-type: none"> • Lower HR training zone: $60\% \times 180 = 108$ bpm (1) • Upper HR training zone: $85\% \times 180 = 153$ bpm (1) 	(2)

Question Number	Answer	Mark
13	Award one mark for each correct answer: <ul style="list-style-type: none"> • Male = 16 (%) (1) • Female = 20 (%) (1) Accept answers within the range 20 - 20.4(%)	(2)

Question Number	Answer	Mark
14	Award one mark for identification of the training method and one mark for applying to preparation for sport activity. Plyometric training (1) prepares the muscles for power-related explosive movements needed in the sports activity (1) Accept any other appropriate answer.	(2)

Question Number	Answer	Mark
15	<p>Award up to two marks for each explanation from:</p> <ul style="list-style-type: none"> • If the lines are further than 20 metres apart (1) the players run further than they should making the test more difficult resulting in a lower VO₂ max result (1) • If players fail to turn in-time with the bleeps (1) this will give them more time to complete the shuttle resulting in a higher VO₂ max result (1) • If players drop out before they reach their maximal exertion (1) their VO₂ max result will be incorrect (1) <p>Accept any other appropriate answer.</p>	(4)

Question Number	Answer	Mark
16(a)	<p>Award one mark for each part of the definition</p> <p>Agility is the ability of a sports performer to quickly and precisely move or change direction (1) without losing balance or time (1)</p> <p>Accept any other appropriate answer.</p>	(2)

Question Number	Answer	Mark
16(b)	<p>Award one mark for a relevant example.</p> <p>Agility can be used:</p> <ul style="list-style-type: none"> • so that a player can quickly get up from the ground after a tackle / goalkeeper makes a save (1) • so that a player can dodge to get away from an opponent / maintain possession of the football (1) <p>Accept any other appropriate answer.</p>	(1)

Question Number	Answer	Mark
17	<p>Award one mark for identification of an advantage or disadvantage and one mark for extension/justification up to two marks each.</p> <p>Candidates may provide 1 advantage and 2 disadvantages OR 2 advantages and 1 disadvantage for full marks.</p> <p>Candidates must address both advantages and disadvantages for full marks.</p> <p>Advantages of circuit training</p> <ul style="list-style-type: none"> • It can be tailored to develop any component of fitness (1) so each member of the group could focus on what was relevant to their sport (1) • You can include a variety of exercises (1) which will maintain the groups interest and maintain their motivation for training (1) <p>Disadvantages of circuit training</p> <ul style="list-style-type: none"> • The session will need careful planning and organisation (1) as the group all want to improve different components of fitness (1) • Too much activity time can be lost during the session (1) because the teacher will need to explain the correct techniques for all the different exercises to make sure the session is safe (1) <p>Accept any other appropriate answers.</p>	(6)

Question Number	Indicative Content	Mark
18	<p>Analysis of data:</p> <ul style="list-style-type: none"> • Links made between stated components of fitness and relevant fitness test. <ul style="list-style-type: none"> - E.g. Sit and reach test is used to measure flexibility • Statements about strengths and weaknesses of different players based on test results. <ul style="list-style-type: none"> - E.g. Amin has excellent ratings for agility, speed and power - Both boys have their weakest rating for flexibility • Statements about nature of the programmes for each performer <ul style="list-style-type: none"> - E.g. Amin should spend more time on flexibility training, e.g. PNF than the other components of fitness as this is his major weakness • No data available about their strength as this is not tested, could have used the grip dynamometer test <p>Evaluation:</p> <ul style="list-style-type: none"> • The boys should apply the principle of individual differences/needs to their training as the results show that they have different strengths/weaknesses. If they follow the same programme they will be working on the wrong components of fitness/will not be improving the areas, they need to • They could use the same training programme but would need to work at different intensities when working on everything but flexibility as they have different ratings meaning that if Amin worked at the same rate as Diego he would not benefit from the training/Amin would not be able to work as hard as Diego. • The fitness tests used are not sport specific enough to make judgements about the fitness of the boys and therefore whether to focus on this component in training, e.g. the sit and reach test only measures flexibility in lower back and hamstrings and although tennis players need flexibility in these areas they also need flexibility at the shoulder which is not tested. • Not all suggested relevant components of fitness have been tested therefore the boys will not know if they have to work on their strength, therefore they may leave out a critical part of training. 	(6)
Level	Marks	Descriptor
	0	No rewardable material
1	1-2	<ul style="list-style-type: none"> • Demonstrates isolated elements of knowledge and understanding, there will be major gaps or omissions • Few of the points made will be relevant to the context in the question • Limited evaluation which contains generic assertions leading to a conclusion that is superficial or unsupported
2	3-4	<ul style="list-style-type: none"> • Demonstrates some accurate knowledge and understanding, with only minor gaps or omissions • Some of the points made will be relevant to the context in the question, but the link will not always be clear

		<ul style="list-style-type: none"> • Displays a partially developed evaluation which considers some different competing points, although not always in detail, leading to a conclusion which is partially supported
3	5-6	<ul style="list-style-type: none"> • Demonstrates mostly accurate and thorough/detailed knowledge and understanding • Most of the points made will be relevant to the context in the question, and there will be clear links • Displays a well-developed and logical evaluation which clearly considers different aspects and competing points in detail, leading to a conclusion that is fully supported

Question Number	Indicative Content		Mark
19	<p>Advantages:</p> <ul style="list-style-type: none"> • Minimal cost involved to administer the test • Can test large numbers of participants at once • Test doesn't require calibration of equipment • Specificity of the step test favours sports performers who make endurance demands of the leg muscle groups (eg cyclists/runners) • easy test method to administer. <p>Disadvantages:</p> <ul style="list-style-type: none"> • Accuracy of the test results depends on correct stepping technique, which can be difficult to maintain, and can be affected by: <ul style="list-style-type: none"> - length of participants legs - using a standard bench height for the method for all participants (leading to inefficient hip angles for stepping) - not achieving correct leg extension (as participant steps up onto the bench) • Participant might not keep up with the set stepping rate (dictated by a metronome) • Participant might have difficulty in taking their own pulse • The step test is not suitable for all populations, eg elderly • Specificity of the step test favours sports performers who make endurance demands of the leg muscle groups (eg cyclists/runners). 		(9)
Level	Marks	Descriptor	
	0	No rewardable material	
1	1-3	<ul style="list-style-type: none"> • Demonstrates isolated elements of knowledge and understanding, there will be major gaps or omissions • Few of the points made will be relevant to the context in the question • Limited discussion which contains generic assertions rather than considering different aspects and the relationship between them 	

2	4-6	<ul style="list-style-type: none"> • Demonstrates some accurate knowledge and understanding, with only minor gaps or omissions • Some of the points made will be relevant to the context in the question, but the link will not always be clear • Displays a partially developed discussion which considers some different aspects and some consideration of how they interrelate, but not always in a sustained way
3	7-9	<ul style="list-style-type: none"> • Demonstrates mostly accurate and detailed knowledge and understanding • Most of the points made will be relevant to the context in the question, and there will be clear links • Displays a well-developed and logical discussion which clearly considers a range of different aspects and considers how they interrelate, in a sustained way

