Component 3: Developing Fitness to Improve Other Participants Performance in Sport and Physical Activity

General marking guidance

- All learners must receive the same treatment. Examiners must mark the first learner in exactly the same way as they mark the last.
- Mark grids should be applied positively. Learners must be rewarded for what they have shown they can do rather than be penalised for omissions.
- Examiners should mark according to the mark grid, not according to their perception of where the grade boundaries may lie.
- All marks on the mark grid should be used appropriately.
- All the marks on the mark grid are designed to be awarded. Examiners should always award full marks if deserved. Examiners should also be prepared to award zero marks if the learner's response is not rewardable according to the mark grid.
- Where judgement is required, a mark grid will provide the principles by which marks will be awarded.
- When examiners are in doubt regarding the application of the mark grid to a learner's response, a senior examiner should be consulted.

Points-Based Mark Scheme Guidance

Points-based mark schemes are made up of:

1. Mark scheme rubric:

   A mark scheme rubric instructs an examiner as to how each mark is awarded.
2. Example responses:

   These demonstrate the type of acceptable responses that a learner might provide and where each mark is awarded.
3. Additional marking guidance:

   This informs examiners about any parameters which should be applied, for example 'accept any other appropriate/alternative responses'.

Applying the points-based mark scheme guidance

Examiners should follow the mark scheme rubric and use the example responses as a guide for the relevance and expectation of the responses. Learners must be credited for any appropriate response. Should learners provide answers that meet the rubric but in an alternative order, credit should be given.

Levels-Based Mark Scheme Guidance

Levels-based mark schemes (LBMS) have been designed to assess learners' work holistically. They consist of two parts:

1. Indicative content:

   Indicative content reflects content-related points that a learner might make but is not an exhaustive list. Nor is it a model answer. Learners may make some or none of the points included in the indicative content as its purpose is as a guide for the relevance and expectation of the responses. Learners must be credited for any appropriate response.

2. Levels-based descriptors:

   Each level is made up of a number of traits which when combined together articulate the quality of response that a learner needs to demonstrate. The traits progress across the levels to demonstrate the different expectations of each level. When using a levels-based mark scheme, the 'best fit' approach should be used.

Applying the levels-based descriptors

Examiners should take a 'best fit' approach to determining the mark.

- Examiners should first make a holistic judgement on which level most closely matches the learner's response. Learners will be placed in the level that best describes their answer. Answers can display characteristics from more than one level, and where this happens markers must use any additional guidance (for example weighting of traits) and their professional judgement to decide which level is most appropriate.
- The mark awarded within the level will be decided based on the quality of the answer and will be modified according to how securely all traits are displayed at that level:
  - marks will be awarded at the top of that level if the learner has evidenced each of the descriptor traits securely.
  - where the response does not securely meet all traits, the marks should be awarded based on how closely the descriptor has been met.

Question Number	Answer	Mark
1 a)	Award **one** mark for the correct response. Aerobic endurance	(1)

Question Number	Answer	Mark
1 b)	Award **one** mark for a correctly named motivation from: • Intrinsic (motivation) • Extrinsic (motivation)	(1)

Question Number	Answer	Mark
1 c)	Award **one** mark for the correct response. Intensity	(1)

Question Number	Answer	Mark
1 d)	Award **one** mark for each correctly stated advantage for each type of provision and **one** mark for each correctly linked benefit, up to a maximum of **four** marks. **Provision** / **Advantage of type of provision** / **Benefit to the performer** Private provision: High tech equipment/up-to-date equipment (1) / More motivating (1) More equipment (1)/ Exclusive (1) / More chance of getting on the fitness machine you want (1) Public provision: Cheaper membership/pay per visit (1) / Will be able to afford to join/play (1) Easily accessible (1) / Nearer to where the performer lives (1) Accept any other appropriate response.	(4)

Question Number	Answer	Mark
1 e)	Award **one** mark for a correctly named questionnaire from: • lifestyle questionnaire (1) • physical activity history (1) • PAR-Q (physical activity readiness questionnaire) (1) Accept any other appropriate response.	(1)

Question Number	Answer	Mark
1 f)	Award **one** mark for a correct reason (1) and **one** mark for a justification for that reason (1), up to a maximum of **two** marks. • To test his speed (1) as he needs to be quick to get to the ball before it bounces out of the court/before it bounces twice (1) Marking points may be reversed/given in any order. Accept any other appropriate response.	(2)

Question Number	Answer	Mark
2 a)	Award **one** mark for each correctly matched line, up to a maximum of **two** marks. A – Static passive B - Plyometrics	(2)

Question Number	Answer	Mark
2 b)	Award **one** mark for a correct reason (1) and **one** mark for a justification for that reason (1), up to a maximum of **two** marks. • To jump that high from the floor she must be developing her power (1) which she will need to get the required time in the air to complete the tumbling phase of her floor routine (1) Marking points may be reversed/given in any order. Accept any other appropriate response.	(2)

Question Number	Answer	Mark
2 c)	Award **one** mark for each of the following linked points, up to a maximum of **three** marks. • She would take 85% (1) of her heart rate maximum (HRM) (1) and work between this and her HRM (1) • 220-21 (1) then work out 85% (1) and 100% of this(1) • Work out 85% (1) and 100% (1) of her heart rate maximum (HRM) (1) • 220 – 21 = 199 (1), 0.85 x 199 = 169.15, (1) 1 x 199 = 199 (1) Accept any other appropriate response.	(3)

Question Number	Answer	Mark
2 d)	Award **one** mark for a correctly given technology from: • Heart rate monitor • Smart watch • Apps Accept any other appropriate response.	(1)

Question Number	Answer	Mark
2 e)	Award **one** mark for each correctly stated principle and **one** mark for each correctly linked reason, up to a maximum of **four** marks.	(4)

SMARTER principles	Name of principle of goal setting represented by letter	Why this principle will increase Catherine's motivation to train
M	Measurable (1)	Allows Catherine to see her progress/knows she is improving (1)
T	Time-related (1)	Knows she will have to keep working to meet her deadline (1)

Accept any other appropriate response in part (ii).

Question Number	Answer	Mark
3 a)	Award **one** mark for the correct response. Standing long jump	(1)

Question Number	Answer	Mark
3 b)	Award **one** mark for a correctly stated reason from: • gives baseline data for monitoring/improving performance • can design training programmes based on test results • determine if training programmes are working • results can give a performer something to aim for • provide goal setting aims. Accept any other appropriate response.	(1)

Question Number	Answer	Mark
3 c)	Award **one** mark for a correct reason (1) and **one** mark for a justification for that reason (1), up to a maximum of **two** marks. • The test measures power to jump high (1) rather than power to dive from the blocks/push from the wall so is more sports specific for the cricketer when jumping high to catch a ball. (1) Marking points may be reversed/given in any order. Accept other appropriate responses	(2)

Question Number	Answer	Mark
3 d)	Award **one** mark for a correct reason (1) and **one** further mark for a justification for that reason (1), up to a maximum of **two** marks. • To give accurate results (1) so they are reliable/consistent over time (1) Marking points may be reversed/given in any order. Accept other appropriate responses.	(2)

Question Number	Answer	Mark
3 e)	Award **one** mark for each correct reason (1) and **one** mark for a justification of each reason (1), up to a maximum of **four** marks. • To gradually lower the pulse (1) to reduce risk of blood pooling/dizziness/fainting (1) • To stretch to help return muscles to pre-exercise length (1) so that flexibility is not reduced (1) Marking points may be reversed/given in any order. Justifications may be interchangeable but must only be rewarded once. Accept other appropriate responses.	(4)

Question Number	Answer	
3 f) (synoptic)	Responses will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Responses may cover some or all indicative content, but learners should be rewarded for other relevant responses. **Assessment may consider:** **Muscular endurance** o Muscular endurance – the ability of the muscular system to continue to contract at a light to moderate intensity to allow repetitive movements throughout a long event or game o Useful in a match/innings if she is batting for a long time o Useful as she has to wear personal protective equipment, which adds extra weight she needs to carry whilst running o Otherwise she could fatigue and not reach the stumps in time o However, if she is out first ball due to poor reaction time muscular endurance will be of limited importance. **Reaction time** o Reaction time – the time taken between a stimulus and the start of a response, useful in fast-paced sports to make quick decisions about what to do o Useful in a match/innings as the ball will be travelling at a fast pace so limited time to make a decision about the shot to play o The better her reaction time the more time she will have to place the ball to score more runs o However, she will also need to speed to get between the wickets before being stumped out. **Assessment:**	(6)

	○ A good reaction time is most important otherwise she will miss the ball and be bowled out before she can utilise her muscular endurance.	

Level	Mark	Descriptor
	0	No rewardable content
1	1–2	• Demonstrates isolated 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 assessment which contains generic assertions rather than considering the factors or events and their relative importance, leading to judgements which are superficial or unsupported.
2	3–4	• 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 assessment which considers some of the factors or events and their relative importance leading to partially supported judgements.
3	5–6	• 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 assessment which clearly considers the factors or events and their relative importance, leading to supported judgements.

Question Number	Answer	Mark
4 a)	Award **one** mark for a correctly named additional principle. • Variation	(1)

<table>
<tr><th>Question Number</th><th>Answer</th><th>Mark</th></tr>
<tr><td>4 b)</td><td>Award one mark for each correctly stated fitness test and one mark for each correctly linked reason, up to a maximum of four marks.

<table>
<tr><th>Component of fitness</th><th>Fitness test</th><th>Why this fitness test is suitable to assess a footballer's fitness</th></tr>
<tr><td>Aerobic endurance</td><td>Multi-stage fitness test/Yo-yo test/
12-minute Cooper run (1)

Also accept:
Harvard step test/12-minute Cooper swim (1)</td><td>• The test involves running, which is specific to football (1)
• Measures their ability to play for 90 minutes without fatigue (1)</td></tr>
<tr><td>Muscular strength</td><td>1 Rep max (1)

Also accept:
grip dynamometer (1)</td><td>• This will allow them to assess the strength of specific muscles used in the game (1)
• Measures their upper body strength so they are effective on the ball (1)</td></tr>
</table>

Accept any other appropriate response.</td><td>(4)</td></tr>
</table>

Question Number	Answer	Mark
4 c)	Award **one** mark for a correct reason (1) and **one** mark for a justification for that reason (1), up to a maximum of **two** marks. • It tests speed (1) once already sprinting, replicating the use of speed in a football match(1) Marking points may be reversed/given in any order. Accept any other appropriate response.	(2)

Question Number	Answer	Mark
4 d)	Award **one** mark for each of the following linked points, up to a maximum of **three** marks. • The runner runs as fast as they can for 60 metres (1) the timer starts as they pass the 30 metre mark (1) and stops as they reach the 60 metre mark (1) Accept any other appropriate response.	(3)

Question Number	Answer	Mark
4 e)	Award **one** mark for each correct additional principle of training (1) and **one** mark for a justification of each additional principle of training (1), up to a maximum of **four** marks. • **Rest and recovery** (1) as he does not train every day/includes rest days (1) • **Progressive overload** (1) because he has fewer rest days in week 2/increases the % 1RM/increases the weight lifted (1) • **Specificity** (1) as he is lifting heavy weights with low reps to develop strength (1) Marking points may be reversed/given in any order. Accept any other appropriate response.	(4)

Question Number	Answer	Mark
4 f)	Award **one** mark for a correct component of fitness (1) and **one** mark for a justification for that component of fitness (1), up to a maximum of **two** marks. • Agility (1) although average he will need a higher rating to effectively avoid opponents when he has the ball (1) • Muscular endurance (1) because his rating was poor and he needs this in football so his muscles can continue to work throughout the game (1) Marking points may be reversed/given in any order. Accept any other appropriate response.	(2)

Question Number	Indicative content	
5 (synoptic)	Responses will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Responses may cover some or all indicative content, but learners should be rewarded for other relevant responses. **Evaluation may consider:** **Pros:** • Use timing gates rather than a stopwatch • More accurate results due to timing, therefore increased reliability of testing • Better footwear/surfaces to give improved grip when testing • Using the most appropriate footwear for surfaces will reduce time taken to complete test/therefore improved results • Use of video playback to improve technique so better result. **Cons:** • Equipment/timing gates are expensive therefore not available to all • Can take time to set up equipment/store equipment so becomes more onerous to run tests • Without use of this technology results will appear worse, giving a false indication of someone's fitness if used for selection • Becomes elitist/not practical to fitness test/provides an unfair advantage to wealthier clubs/individuals. **Conclusion/Evaluation:** Overall viewpoint that if test results are being compared the same technology should be available for all being compared to ensure parity. With technology an individual's test results should be more reliable and therefore useful when monitoring progress. Technology can lead to improved fitness test scores, giving a more accurate reflection of the individual's ability.	(6)

Level	Mark	Descriptor
	0	No rewardable content
1	1–2	• 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	• 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 evaluation which considers some different competing points, although not always in detail, leading to a conclusion which is partially supported.
3	5–6	• 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.