



Mark Scheme (Results)

June 2024

Pearson BTEC Tech Award

In Sport (BSP03)

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

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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:
 - o marks will be awarded at the top of that level if the learner has evidenced each of the descriptor traits securely.
 - o 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: <ul style="list-style-type: none"> • C – 30 metre sprint test 	(1)

Question number	Answer	Mark
1(b)	Award one mark for naming a correct test. <ul style="list-style-type: none"> • <u>Ruler drop</u> test (1) • <u>Online reaction</u> time test (reaction test timer) (1) <p>Must include the full reference to ruler and drop</p>	(1)

Question number	Answer	Mark
1(c)	Award one mark for: <ul style="list-style-type: none"> • D – RPE 	(1)

Question number	Answer	Mark
1 (di) & 1 (dii)	Award one mark for naming the SMARTER principle and one mark for explaining how this principle can be applied, up to a maximum of two marks per principle of training. <ul style="list-style-type: none"> • Achievable/attainable (1) it must be <u>possible/in reach/realistic</u> for Jamie to achieve the goal/not too hard (1) • Time-related/time-scale/time (1) there should be a timescale for the completion of the programme (1) <p>Accept any other appropriate response for time-related/time-bound</p> <p>Must have the name (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(4)

Question number	Answer	Mark
1 (e)	<p>Award one mark for stating one long-term effect.</p> <ul style="list-style-type: none"> • Muscle hypertrophy/increased muscle size/muscular strength (1) • Increased bone density (1) • Increased tendon and ligament strength (1) <p>DNA – increase in size/strength or getting stronger without reference to muscles. DNA – bone density without reference to an increase. DNA – lift more/heavier weights DNA – building up muscles</p> <p>Accept any other appropriate answer.</p>	(1)

Question number	Answer	Mark
1 (f)	<p>Award one mark for description and one mark for linked expansion.</p> <ul style="list-style-type: none"> • Increase in speed/getting faster/standing start to jogging/jogging to a maximum sprint (1) <u>reach full</u> 100m <u>speed/pace quicker</u> (1) <p>DNA – improves speed. DNA – start fast/faster set off as this is a reference to reaction time DNA – sprinting for longer Must have the description (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(2)

Question number	Answer	Mark
2 (a)	<p>Award one mark for each correctly matched line, up to a maximum of two marks</p> <p>Sit and reach test (A) – cm (1) Body mass index (B) – kg/m² (1)</p>	(2)

Question number	Answer	Mark
2(b)	<p>Award one mark for identifying a correct reason and one mark for linked expansion.</p> <ul style="list-style-type: none"> • Hand eye coordination/see the ball and use hand/arm (1) to swing the bat/hit the ball/catch the ball/throw the ball (1) <p>DNA – two or more body parts Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(2)

Question number	Answer	Mark
2 (c)	<p>Award one mark for each stage, up to a maximum of three marks.</p> <ul style="list-style-type: none"> • Weight/body mass (<u>kg</u>) (1) • Height (<u>m</u>) (1) • BMI equation = Body weight/Height x Height (1) <p>DNA – cm/centimetres for height</p> <p>Must include the measurement for the first two marks</p>	(3)

Question number	Answer	Mark
2 (d)	Award 1 mark for: <ul style="list-style-type: none"> • Reversibility (1) 	(1)

Question number	Answer	Mark
2 (ei) & 2 (eii)	<p>Award one mark for naming each part of a warm-up up to a maximum of two marks. Award one mark for explaining each part of the warm-up, up to a maximum of two marks.</p> <ul style="list-style-type: none"> • Pulse raiser/example i.e. jogging (1) preparing the body for exercise to be undertaken/so that the blood/oxygen is directed <u>to the muscles</u>/increase heart rate/breathing rate (1) • Mobiliser (1) so that joints can cope with the range of movement/increase production of synovial fluid to the joint (1) • Stretching/example of a stretch (1) to prevent injuries from occurring (1) <p>Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(4)

Question number	Answer	Mark
3(a)	<p>Award one mark for:</p> <ul style="list-style-type: none"> • A – Specificity (1) 	(1)

Question number	Answer	Mark
3 (b)	<p>Award one mark for:</p> <ul style="list-style-type: none"> • Examples might include balance to take a kick/withstand a tackle/take a line-out, stay on feet in a scrum (1) etc. <p>Need to include an example from rugby</p> <p>Accept any other appropriate answer.</p>	(1)

Question number	Answer	Mark
3 (c)	<p>Award one mark for identifying a correct test and one mark for a description.</p> <ul style="list-style-type: none"> • Stork stand test (1) the individual places the sole of the right foot against the left leg and raises the heel of the left foot to stand on their toes (1) • Y balance test (1) standing on one leg the other leg touches behind. The non-stance foot reaches out (1) <p>Standing on one leg = TV Raise one leg = TV Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(2)

Question number	Answer	Mark
3 (d)	<p>Award two marks for describing two features of a circuit session, up to a maximum of two marks.</p> <ul style="list-style-type: none"><li>• A range of stations/exercises/activities/machines/muscle groups (1)<li>• Workout time (at each station) (1)<li>• Rest periods (1)<li>• Number of circuits (1) <p>Accept any other appropriate answer.</p>	(2)

Question number	Answer	Mark
3 (e)	<p>Award one mark for each description, up to a maximum of two marks. Award one mark for each linked explanation, up to a maximum of two marks.</p> <p>Reliability</p> <ul style="list-style-type: none"> • Consistent/repeated/get the same results/compare to normative data (1) by carrying out in the same environment/conditions/calibrated equipment (1) <p>Practicality</p> <ul style="list-style-type: none"> • How easy it is to carry out the fitness test (1) so that the test can be done by more than one person/is cheap to administer/need minimal equipment (1) <p>DNA – unfair/fair results</p> <p>Can award the expansion (second mark) without the explanation (first mark) for this response</p> <p>Accept any other appropriate answer.</p>	(4)

Question number	Answer	Mark
3 (f)	<p>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.</p> <p>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.</p> <p>Assessment may consider:</p> <p>Proprioceptive neuromuscular facilitation (PNF)</p> <ul style="list-style-type: none"> • Stretching with a partner/immovable object (MP1) • Improves/trains flexibility (MP2) • PNF training increases the <u>range</u> of movement permitted at a joint/increases the flexibility of ligaments or tendons (MP3) • Flexibility is important in rugby when reaching for a ball, throwing a ball, to get low in a scrum (MP4) • Reduced injury risk (MP5) <p>Sub-max 3 marks</p> <p>Free weights - high repetitions and low loads.</p> <ul style="list-style-type: none"> • Improves/trains muscular endurance (MP6) • Muscular endurance is important in rugby to repeatedly carry out movements /long periods of time/withstand fatigue or lactic acid (MP7) • Muscular endurance training increases the capillarisation around the muscle tissues/increases muscle tone (MP8) • To be able to tackle/continue to move around the field (MP9) <p>Sub-max 3 marks</p> <p>Accept any other appropriate answer.</p>	(6)

Level	Mark	Descriptor
	0	No rewardable content
1	1-2	<ul style="list-style-type: none"> • 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. <p>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.</p>
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. • 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	<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 assessment which clearly considers the factors or events and their relative importance, leading to supported judgements

Question number	Answer	Mark
4 (a)	<p>Award one mark for:</p> <ul style="list-style-type: none"> • Continuous (training) (1) <p>Accept any other appropriate answer.</p>	(1)

Question number	Answer	Mark
4 (bi) & 4 (bii)	<p>Award one mark for stating each type of provision, up to a maximum of two marks and one mark for describing each advantage, up to a maximum of two marks.</p> <ul style="list-style-type: none"> • Public (1) cheap access (1) • Private (1) higher standard of facility/equipment (1) <p>DNA – newer equipment Must be an <u>advantage</u> (do not credit disadvantages)</p> <p>Accept any other appropriate answer.</p>	(4)

Question number	Answer	Mark
4 (c)	<p>Award one mark for each identification, up to a maximum of two marks. Award one mark for each linked explanation, up to a maximum of two marks.</p> <p>Advantages</p> <ul style="list-style-type: none"> • Minimal costs/equipment involved/easy to set up/complete (1) can repeat the test as many times as required (1) • Test can accommodate groups/large numbers of participants (1) therefore quicker to administer (1) • Participants run to exhaustion (1) therefore a good prediction of aerobic endurance (1) <p>Disadvantages</p> <ul style="list-style-type: none"> • The correct technique must be used/same conditions/effected by the weather (1) otherwise the test will not be reliable/valid (1) • The test may not suitable for all populations/elderly (1) the test may be unsafe for some (1) • The participants must be motivated/can be boring (1) otherwise will not provide an accurate measurement of <u>aerobic endurance</u>/may give up/not work to maximal (1) <p>DNA – can be done anywhere Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate response.</p>	(4)

Question number	Answer	Mark
4 (d)	<p>Award one mark for each identification, up to a maximum of two marks. Award one mark for each linked explanation, up to a maximum of two marks.</p> <ul style="list-style-type: none"> • Monitor heart rate (1) to work at/monitor an intensity/heart rate training zone/how hard/to work hard enough/not too hard (1) • Record calories/energy expended (1) to monitor/so you know how many you need to replace (1) • Can monitor the number of steps/distance/time (1) to record in your programme/prevent overtraining/confirmation of workout completed/show improvements (1) • Measure how many hours of sleep a night you get (1) monitor rest/recovery period (1) <p>Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(4)

Question number	Answer	Mark
4 (e)	<p>Award one mark for:</p> <ul style="list-style-type: none"> • Intrinsic motivation (1) • Extrinsic motivation (1) <p>Accept any other appropriate answer.</p>	(1)

Question number	Answer	Mark
4 (f)	<p>Award one mark for identifying a reward. Award one mark for linked expansion.</p> <p>Rewards (1)</p> <ul style="list-style-type: none"> • Trophies • Certificates • Medals • Non-material/praise • Award • Money <p>Expansion (1)</p> <ul style="list-style-type: none"> • Feel like their performance is recognised by the coach/others so more likely to work harder/participate more/set more goals. <p>Must have the ID (first mark) to be awarded the expansion (second mark)</p> <p>Accept any other appropriate answer.</p>	(2)

Question number	Answer	Mark
5	<p>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.</p> <p>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.</p> <p>Discussion points may consider</p> <p>The component does not need to be linked to the fitness test for the response to be credited</p> <p>Vertical jump test</p> <ul style="list-style-type: none"> • Power (MP1) • Training method to improve power would be plyometrics (MP2) • Explosive movements (MP3) • This would improve her performance as she would be able to jump higher to spike/block the ball/to hit the ball with more power (MP4) <p>Sub-max 3 marks</p> <p>Illinois agility run test</p> <ul style="list-style-type: none"> • Agility (MP5) • Training method to improve agility would be speed, agility and quickness training/SAQ (MP6) • Changing direction <u>at speed</u> (MP7) • To be able to <u>change direction on court quickly to react to a ball</u> (MP8) <p>Sub-max 3 marks</p> <p>One minute press-up test</p> <ul style="list-style-type: none"> • Muscular endurance (MP9) • Training method to improve endurance would be circuit training/fixed resistance machines/free weights/resistance bands (MP10) • This would improve her performance as she would be able to maintain her position on the court/ repeatedly return the ball (MP11) <p>Sub-max 3 marks</p>	(6)

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	0	No rewardable content
1	1-2	<ul style="list-style-type: none"> • 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. <p>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.</p>
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. • 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	<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 assessment which clearly considers the factors or events and their relative importance, leading to supported judgements

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