

Date – Morning/Afternoon

GCSE (9–1) Physical Education

J587/01 Physical factors affecting performance

Sample Question Paper

Version 2.7

Time allowed: 1 hour

No extra materials are needed.



Please write clearly in black ink. **Do not write in the bar codes.**

Centre number

Candidate number

First name(s) _____

Last name _____

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined page(s) at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION

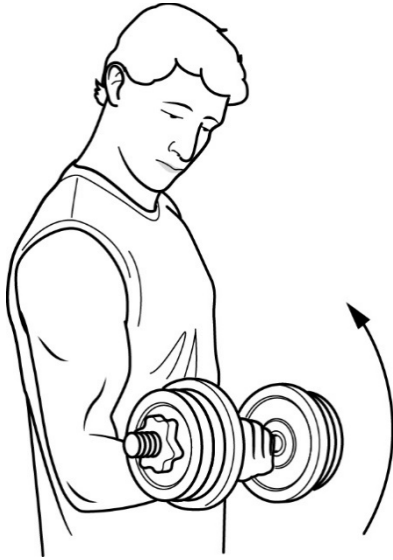
- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in the question marked with an asterisk (*).
- This document consists of **16** pages.

ADVICE

- Read each question carefully before you start your answer.

Section A

1 The image shows someone doing a bicep curl.



Name the agonist **and** the antagonist muscles being used.

Agonist:

Antagonist: **[1]**

2 State **two** differences between continuous training and fartlek training.

1

.....

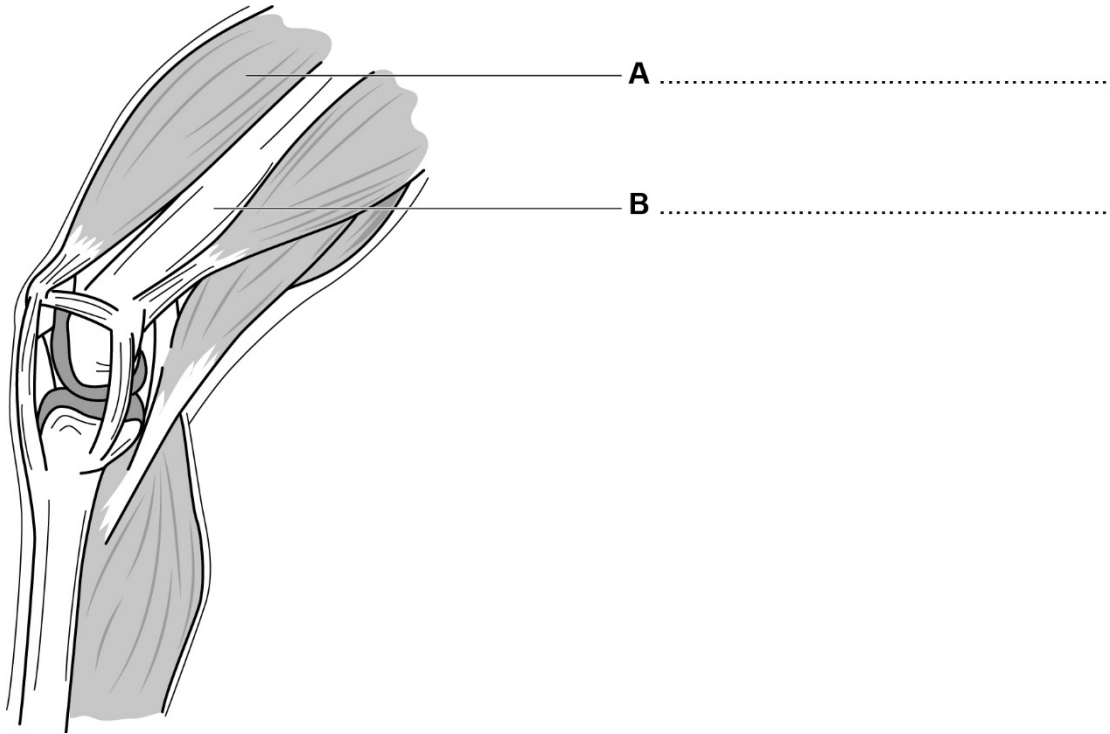
2

.....

[2]

3
(a) This is a diagram of the knee.

Label the muscle group **A** and the bone **B**.



[2]

(b) Describe **two** roles of ligaments within joints during exercise.

1

2

[2]

4 Which **one** of the following is an example of the overload principle of training?

Tick (✓) **one** box next to the correct answer.

Adapting training sessions to suit your needs.

Lifting too much weight during a training session.

Losing muscle strength due to lack of training needs.

Working harder than normal during training.

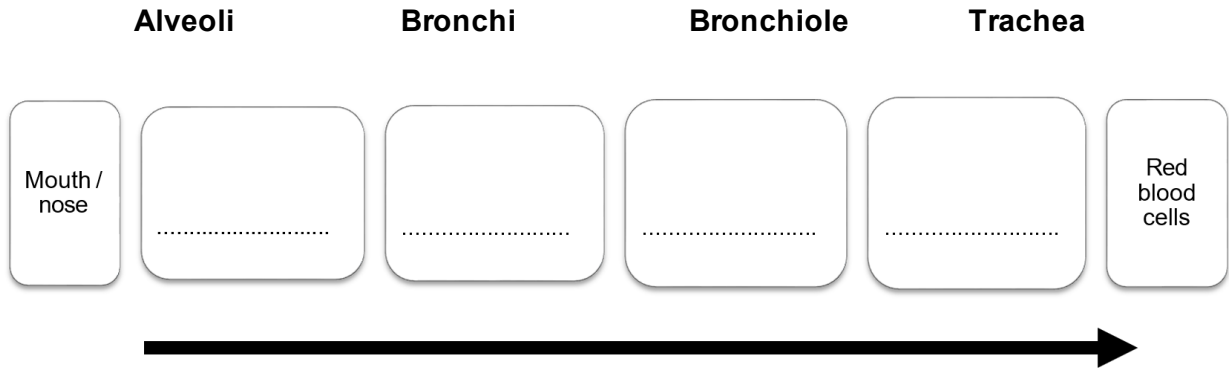
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[1]

5 This diagram shows the passage of air from when oxygen is breathed in through the mouth or nose until oxygen is passed to the red blood cells.

Complete the diagram using these words.

Each word should be used once.



[1]

6 Describe **one** role of red blood cells during exercise.

..... [1]

7 Is this statement true or false?

This dancer has performed a movement that passes through the frontal plane.



.....

[1]

8 Which statement is false?

Tick (✓) **one** box next to the correct answer.

The deltoid is a fixator during a biceps curl.

The elbow flexes during a press up.

Third class levers give mechanical advantage.

Most lever systems in the body are third class.

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<input type="checkbox"/>

[1]

9 Identify the waste product which causes muscular fatigue during exercise.

.....

[1]

10 Fill in the table below.

Component of cool down	Description of cool down activity	Physical benefit
.....	light jogging around the rugby pitch
stretching	promotes recovery of muscles for next rugby match

[3]

11 Complete the statements using two words from this list.

rotation

sagittal

tidal volume

transverse

(a) The volume of air moved in and out of the lungs per breath is known as... ..

(b) The series of images shows a golf swing.

The main movement plane during a golf swing is



[2]

12 What class of lever is involved when performing a header in a game of football?
..... [1]

13 Describe **three** functions of the skeleton.
1
.....
2
.....
3
..... [3]

14 Describe **two** different practical examples of mobility exercises which could be used as part of a warm up for a physical activity or sport.
Physical activity or sport:
Mobility exercise 1
.....
Mobility exercise 2
..... [2]

15 Which axis of rotation will a gymnast use when performing a cartwheel?
..... [1]

16 Identify a suitable test to assess the stamina of a marathon runner.
..... [1]

17 Which is **not** an articulating bone of the elbow joint?

Tick (✓) **one** box next to the correct answer.

- Clavicle
- Humerus
- Radius
- Ulna

[1]

18 Describe what is meant by High Intensity Interval Training (HIIT).

.....
..... [1]

19 Explain **one** way correct footwear can **minimise** the risk of injury in physical activity or sport.

Use a practical example in your answer.

..... [1]

20 What is a practical example of muscular endurance?

Tick (✓) **one** box next to the correct answer.

An athlete running a 1500 metre race.

A basketball player dribbling around an opponent to score a basket.

A rugby player who sprints from the half way line to score a try.

A sprinter driving out of the blocks at the start of a race.

[1]

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PLEASE DO NOT WRITE ON THIS PAGE

Turn over for the next question.

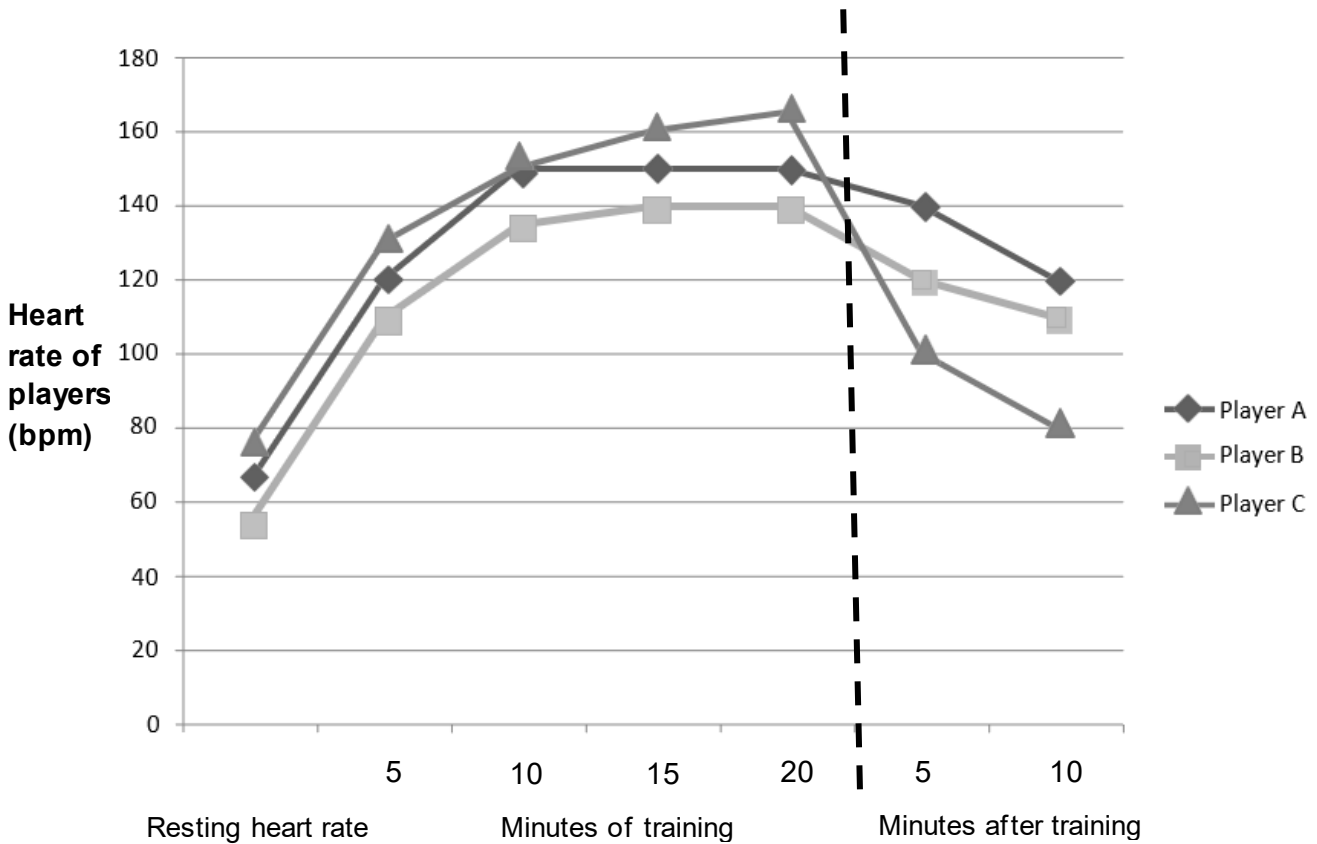
Section B

21 Three footballers take part in a pre-season football training programme.

The training programme lasts for eight weeks.

The footballers' heart rates are monitored before and after each training session.

This graph shows heart rate results for the players during the **first** training session of the programme.



(a) Use the information in the graph to analyse the fitness levels, performance and recovery of the three players.

Fitness Levels

.....

Performance in training

.....

Recovery

..... **[3]**

(b) Describe **two** short-term effects which the pre-season training programme could have on the three football players' hearts.

1

.....

2

..... **[2]**

(c) Evaluate how the **long term** effects of exercise on the muscular system could be beneficial to a footballer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... **[5]**

22

- (a)** The heart is responsible for pumping blood around the body.

Describe how the double circulatory system performs this function.

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[4]

- (b)** Dancers are warming up for a performance.

Dancer A is sitting on the floor performing static stretching.

Dancer B is performing a dress rehearsal of their physically demanding dance routine.

- (i)** Describe how the changes in blood flow for Dancer B will be different to those for Dancer A.

.....
.....
.....
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.....
.....
.....

[3]

- (ii)** Compare the changes in the respiratory system of Dancer A to Dancer B during the warm up.

.....
.....
.....
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.....
.....
.....

[3]

23

(a) 'Type' is one of the components of the FITT principle of training.

High Intensity Interval Training is an example of a 'type' of training.

Give **two** other practical examples of 'type' in personal exercise programmes.

Assess **two** ways that using the correct types of training may help a performer during training.

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[4]

EXTRA ANSWER SPACE

If you need extra space use these lined page. You must write the question numbers clearly in the margin.

A large rectangular area with a solid vertical line on the left side and horizontal dotted lines extending across the page, providing space for writing answers.

Summary of updates

Date	Version	Details
September 2021	2.6	Updated copyright acknowledgements.
December 2024	2.7	Changes to drawings, formatting and accessibility updates

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...day June 20XX – Morning/Afternoon

GCSE (9–1) Physical Education

J587/01 Physical factors affecting performance

SAMPLE MARK SCHEME

Duration: 1 hour

MAXIMUM MARK 60

This document consists of 24 pages

MARKING INSTRUCTIONS

PREPARATION FOR MARKING SCORIS

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: Scoris Assessor Online Training; OCR Essential Guide to Marking.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal <http://www.rm.com/support/ca>
3. Log-in to scoris and mark the 10 practice responses (“scripts”) and the 10 standardisation responses

YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

MARKING

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the Scoris 50% and 100% (traditional 40% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the Scoris messaging system, or by email.
5. Work crossed out:
 - a. where a candidate crosses out an answer and provides an alternative response, the crossed out response is not marked and gains no marks
 - b. if a candidate crosses out an answer to a whole question and makes no second attempt, and if the inclusion of the answer does not cause a rubric infringement, the assessor should attempt to mark the crossed out answer and award marks appropriately.
6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there then add a tick to confirm that the work has been seen.















7. There is a NR (No Response) option. Award NR (No Response)
- if there is nothing written at all in the answer space
 - OR if there is a comment which does not in any way relate to the question (e.g. 'can't do', 'don't know')
 - OR if there is a mark (e.g. a dash, a question mark) which isn't an attempt at the question

Note: Award 0 marks - for an attempt that earns no credit (including copying out the question)

8. The scoris **comments box** is used by your team leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.** If you have any questions or comments for your team leader, use the phone, the scoris messaging system, or e-mail.
9. Assistant Examiners will send a brief report on the performance of candidates to your Team Leader (Supervisor) by the end of the marking period. The Assistant Examiner's Report Form (AERF) can be found on the RM Cambridge Assessment Support Portal (and for traditional marking it is in the Instructions for Examiners). Your report should contain notes on particular strength displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.
10. For answers marked by levels of response:
- a. **To determine the level** – start at the highest level and work down until you reach the level that matches the answer
 - b. **To determine the mark within the level**, consider the following:

Descriptor	Award mark
On the borderline of this level and the one below	At bottom of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Consistently meets the criteria for this level	At top of level

11. Annotations used in the detailed Mark Scheme

	?	Unclear
	BOD	Benefit of doubt
	Cross	Incorrect
	L1	Level 1
	L2	Level 2
	L3	Level 3
	REP	Repeat
	Tick	Correct
	VG	Vague
	SEEN	Noted but no credit given
	S	S (indicates 'sub max reached')
	EG	Example
	K	Knowledge
	DEV	Development

- Sub-maxes are indicated with **S**; the guidance section of the mark scheme shows which questions these are relevant to.
- **K** and **DEV** used instead of ticks on the extended response question to indicate where knowledge or development points from the indicative content have been made.

On this extended response question, one K or DEV does not necessarily equate to one mark being awarded; the marking is based on a levels of response mark scheme which awards a level and mark holistically based upon the quality of the response overall against the levels descriptors.

Section A				
Question		Answer	Marks	Guidance
1		Agonist – Biceps Antagonist - Triceps	1 1 x (AO2)	Must have both parts to gain the mark
2		Two marks from: 1. Fartlek is a variation of speed/speed play whereas continuous more constant speed/no (little) rest 2. Fartlek consists of a variety of activities/cross country running with sprints/different terrains whereas continuous just jogging/running with no variation 3. Fartlek includes short and long distance work/running and walking/different intensities/aerobic and anaerobic work whereas continuous mainly long distance/same intensity/aerobic	2 2 x (AO1)	Must compare fartlek and continuous training to award each mark.
3	(a)	Muscle group A – Quadriceps Bone B – Femur	2 2 x (AO1)	One mark for each.
	(b)	Two marks from: 1. They connect bone to tissue/they are connective tissue 2. They stabilize the joints during movement/prevent dislocation/restrict movement 3. They are able to protect joints/bones (because of their elasticity)/they can absorb shock 4. They help maintain correct posture/movement or enable proprioception	2 2 x (AO1)	

Section A				
Question	Answer		Marks	Guidance
4		Working harder than normal during training	1 1 x (AO2)	
5		trachea bronchi bronchiole alveoli	1 1 x (AO1)	Must be in correct order for mark to be awarded.
6		One mark from: 1. transports oxygen to the working muscles 2. transport carbon dioxide (to the lungs)	1 1 x (AO1)	Do not accept single word answers. Do not accept answers relating to features e.g. made in bone marrow – answers must relate to role during exercise .
7		True	1 1 x (AO3)	
8		Third class levers give mechanical advantage.	1 1 x (AO2)	
9		Lactic acid	1 1 x (AO1)	

Section A			
Question	Answer	Marks	Guidance
10	<p>Three marks for:</p> <p>(i) lower intensity exercise (AO1)</p> <p>(ii) static/maintenance or any example of a targeted stretch e.g. hamstring stretch (AO2)</p> <p>(iii) gradually lowers heart rate/reduce temperature (AO1)</p>	<p>3</p> <p>2 x (AO1)</p> <p>1 x (AO2)</p>	<p>Must answer all three parts to gain three marks.</p> <p>Accept equivalent examples for stretching as long as qualified, i.e. stretching a targeted area or a type of stretching.</p> <p>Gradually or equivalent required for physical benefit (part iii).</p>
11	<p>Two marks for:</p> <p>(a) tidal volume (AO1)</p> <p>(b) transverse (AO3)</p>	<p>2</p> <p>1 x (AO1)</p> <p>1 x (AO3)</p>	
12	<p>First/1st (class lever)</p>	<p>1</p> <p>1 x (AO1)</p>	
13	<p>Any three from:</p> <p>1. support – keeps body upright/provides framework to support muscles/tissues in body</p> <p>2. posture – skeleton/skeletal structure gives correct shape to the body</p> <p>3. protection – parts of the skeleton/skeletal structure protect internal organs/reduce risk of injury/damage on impact (e.g. ribs protect the heart, cranium protects the brain)</p> <p>4. movement – skeleton/skeletal structure allows muscle</p>	<p>3</p> <p>3 x (AO1)</p>	<p>Must describe the function to be awarded marks, examples may form part of the description e.g. cranium protecting the brain on impact.</p>

Section A			
Question	Answer	Marks	Guidance
	<p>attachment/provides leverage to enable movement</p> <p>5. (red) blood cell production – bone marrow in some larger bones produces blood cells</p> <p>6. storage of minerals – bones release minerals in to the blood as needed (calcium phosphorus)</p>		
14	<p>1. Shoulder circles – taking arm through full range of movement at the shoulder</p> <p>2. Arm swings - swing both arms out to your sides and then cross them in front of your chest</p> <p>3. Lateral rotations of neck - turn your chin laterally toward your left shoulder and then rotate it toward your right shoulder</p> <p>Examples of activities could include: swimming, volleyball, tennis, javelin, etc...</p> <p>4. Hip circles - with your hands on your hips and feet spread wider than your shoulders, make circles with your hips in a clockwise direction</p> <p>5. Side bends - knees slightly bent, hands resting on hips, bend first to one side, then the other, avoiding the tendency to lean either forwards or backwards</p> <p>6. Leg swings - Weight on your left leg and your right hand on the wall for balance; swing your right leg forward and backward</p> <p>7. Lunges - Keeping the back straight lunge forward with the right leg; return to the starting position and repeat</p>	<p>2</p> <p>2 x (AO2)</p>	<p>Accept other suitable examples of physical activities/sports but must be related to the mobility exercise described.</p> <p>Both description of mobility exercise and applicable physical activity/sport required for each mark.</p> <p>No mark for naming a physical activity or sport</p>

Section A					
Question	Answer			Marks	Guidance
			with the left leg Examples of activities: football, hockey, high jump, basketball, netball, etc....		
15			Frontal	1 1 x (AO3)	
16			One mark from: 1. Multi-stage fitness test/bleep/beep test 2. (Cooper)12 minute run/walk	1 1 x (AO1)	
17			clavicle	1 1 x (AO1)	
18			One mark from: 1. a training idea in which high intensity periods are alternated with low/moderate intensity intervals 2. involves high overload with (short) rest periods in between 3. involves repetition of short bursts of anaerobic activity	1 1 x (AO1)	Do not accept single word answers. Do not accept 'high intensity' on its own.

Section A				
Question		Answer	Marks	Guidance
		followed by aerobic activity		
19		<p>One mark for:</p> <p>1. can stop you slipping over e.g. spikes in athletics</p> <p>2. prevent blisters when performing if well-fitting e.g. for endurance events</p> <p>3. protection from impact e.g. toe protectors in cricket boots</p> <p>4. provides stability and support for foot and/or ankle e.g. basketball boots</p> <p>5. absorbs the impact e.g. cushioned soles for road running</p>	<p>1</p> <p>1 x (AO2)</p>	Only accept if a suitable practical example is used.
20		A rugby player who sprints from the half way line to score a try	<p>1</p> <p>1 x (AO2)</p>	

Section B				
Question		Answer	Marks	Guidance
21	(a)	<p>Three marks from:</p> <p>1. (Fitness levels) Player B has the best level of fitness because they have the lowest resting heart rate. Player C has the lowest fitness level</p>	<p>3</p> <p>3 x (AO3)</p>	

Section B			
Question	Answer	Marks	Guidance
	<p>as they have the highest resting heart rate.</p> <p>2. (Performance in training) Player C might have worked hardest during the session as their heart rate peaks highest</p> <p>OR</p> <p>(Performance in training) Players A and B may not have worked as hard in the middle of the session as their heart rate plateaus (Player A from 10-20mins; Player B from 15-20 mins)</p> <p>3. (Recovery) Players A and B both do cool downs but Player C does not as there is a sudden decrease in heart rate after the session for player C whereas the decrease is gradual for players A and B</p>		
(b)	<p>Two marks from:</p> <p>1. increased heart rate</p> <p>2. increase in stroke volume</p> <p>3. increase in blood temperature</p> <p>4. more blood/oxygen diverted to working muscles</p>	<p>2</p> <p>2 x (AO2)</p>	

Section B			
Question	Answer	Marks	Guidance
	5. blood vessels near skin open to let out heat		
(c)	<p>Five marks from:</p> <p>1. increase in size/mass/hypertrophy/growth (of muscle) e.g. – Easier for player to shield the ball away from opponent</p> <p>2. increase in strength/stronger/power/tone/force e.g. – Able to kick the ball harder/further</p> <p>3. increase in speed (of contraction) e.g. – Beating an opponent in a sprint to get the ball first</p> <p>4. increase in muscular endurance or able to last longer/decrease in fatigue e.g. – Easier to perform for the entire game/90 minutes</p> <p>5. increase in flexibility/able to stretch further/elasticity e.g. – Able to stretch for the ball further when making a tackle/less likely to get injured</p> <p>6. increase tolerance to lactic acid e.g. – Able to keep playing for longer/ harder/increased chances of lasting 90 minutes</p> <p>7. increase in recovery rate e.g. – Player ready for next game/training quicker</p> <p>8. increased rate of removal of lactic acid e.g. - Able to keep playing for longer/harder/increased chances of lasting 90 minutes</p>	<p>5</p> <p>5 x (AO3)</p>	Only accept answers that are linked to how they may actually benefit a footballer.

Section B				
Question		Answer	Marks	Guidance
		<p>9. greater potential for energy production e.g. - Able to keep playing for longer/ harder/increased chances of lasting 90 minutes</p> <p>10. increase in size/number of mitochondria e.g. Able to compete in a game faster/longer</p> <p>11. increase in capillaries/more oxygen/haemoglobin available e.g. the player is able to work harder/longer</p> <p>12. helps to prevent injury/assists with recovery from injury e.g. – Less prone to injury during a game of football</p>		
22	(a)	<p>Four marks from:</p> <p>1. heart consists of two separate loops/circuits/one loop for heart and lungs and one for heart and rest of body</p> <p>2. blood travels through the heart twice (during a complete cycle around the body)</p> <p>(Sub-max three marks for):</p> <p>3. pulmonary circulation</p> <p>4. deoxygenated blood from right ventricle to lungs</p> <p>5. pulmonary artery carries deoxygenated blood to lungs</p>	<p>4</p> <p>4 x (AO1)</p>	

Section B					
Question		Answer	Marks	Guidance	
		<p>6. oxygenated blood back to left atrium</p> <p>7. pulmonary vein carries oxygenated blood back to left atrium</p> <p>(Sub-max three marks for):</p> <p>8. systemic circulation</p> <p>9. oxygenated blood from left ventricle to body/muscles</p> <p>10. Aorta carries oxygenated blood to body tissues/muscles</p> <p>11. deoxygenated blood back to right atrium</p> <p>12. vena cava carries deoxygenated blood back to right atrium</p>			
	(b)	(i)	<p>Three marks from:</p> <p>1. Dancer B will be experiencing more blood flow to their working muscles than Dancer A because they are being more active/more intense activity level</p> <p>2. Dancer B will have less blood going to other organs than Dancer A because more is going to working muscles to provide more oxygen</p> <p>3. The re-distribution of blood to working muscles to provide oxygen during physical activity is known as</p>	<p>3</p> <p>3 x (AO2)</p>	Must have compared both dancers to access 3 marks

Section B				
Question		Answer	Marks	Guidance
		<p>the vascular shunt mechanism</p> <p>4. Dancer A will be experiencing all of these too, but to a much lesser extent than Dancer B because the static stretches are lower intensity activity and so muscles do not require so much oxygen.</p>		
	(ii)	<p>Three marks from:</p> <p>1. Dancer B's respiratory/breathing rate will be greatly increased due to the intensity of the activity; Dancer A will not experience such an increase.</p> <p>2. Dancer B's tidal volume will be greatly increased along with the depth of their breathing because they are working harder</p> <p>3. Dancer B's minute volume/ventilation will be greatly increased due to the intensity of the activity and need for more oxygen.</p> <p>4. Dancer A will have a rise in breathing rate, tidal volume and minute volume but to a much lesser extent than Dancer B because of their level of activity.</p>	<p>3</p> <p>3 x (AO2)</p>	Must have compared both dancers to access 3 marks
23	(a)	<p>Two marks from:</p> <p>(examples of 'type')</p> <p>1. continuous</p> <p>2. fartlek</p> <p>3. interval</p>	<p>4</p> <p>2 x (AO2)</p>	Give one mark for each of two suitable examples of applying 'type' to a personal exercise training programme

Section B				
Question		Answer	Marks	Guidance
		4. circuit training 5. weight training 6. plyometrics Two marks from: 1. adherence – varying types of exercise/training makes it less boring/reduces tedium 2. appropriateness/effectiveness - if the type(s) of exercise are appropriate, then training will be more effective 3. avoiding injury – can reduce risk of injury by doing a range of exercises instead of repeating the same ones 4. positive feelings/reinforcement – getting good results from the right type(s) of training makes you want to continue 5. clearer outcomes – easier to tell if your needs/aims are being met if correct type(s) of training used	2 x (AO3)	Must assess <u>how</u> the principle can help for each mark.

Section B			
Question	Answer	Marks	Guidance <u>Discriminators</u>
23 (b)*	<p>Level 3 (5–6 marks)</p> <ul style="list-style-type: none"> • detailed knowledge & understanding • clear and consistent practical application of knowledge & understanding • effective analysis/evaluation and/or discussion/explanation/development • relevant information drawn upon from other areas of the specification • accurate use of technical and specialist vocabulary • there is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. <p>Level 2 (3–4 marks)</p> <ul style="list-style-type: none"> • satisfactory knowledge & understanding • some success in practical application of knowledge & understanding • analysis/ evaluation and/or discussion/explanation/development attempted with some success • some relevant information drawn upon from other areas of the specification • technical and specialist vocabulary used with some accuracy • there is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. <p>Level 1 (1–2 marks)</p> <ul style="list-style-type: none"> • basic knowledge & understanding • little or no attempt at practical application of knowledge & understanding 	<p>6</p> <p>2 x (AO1)</p> <p>2 x (AO2)</p> <p>2 x (AO3)</p>	<p>Level 3</p> <ul style="list-style-type: none"> • a detailed explanation of how risk of injury may be reduced is developed, with appropriate practical examples given (AO1 & AO2) • several different ways in which health, fitness and wellbeing influence the risk of injury are discussed (AO3) • at the top of this level, all aspects are well addressed. <p>Level 2</p> <ul style="list-style-type: none"> • an explanation of some ways to reduce the risk of injury is given (AO1), with occasional development or application of practical examples (AO2) • some ways in which at least two of health, fitness and wellbeing influence the risk of injury <i>may be</i> discussed (AO3). • a detailed explanation of how risk of injury may be reduced with development (AO1 and AO2) can still achieve 4 marks but cannot access Level 3 (no AO3) <p>Level 1</p> <ul style="list-style-type: none"> • some basic knowledge and understanding relating to ways to reduce the risk of injury (AO1) • successful development of a point or use of an example (AO2) or attempt to explain how health, fitness or wellbeing influence the risk of injury (AO3) would indicate the top of this level

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	<ul style="list-style-type: none"> • little or no attempt to analyse/ evaluate and/or discuss/explain/develop • little or no relevant information drawn upon from other areas of the specification • technical and specialist vocabulary used with limited success • the information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear. <p>(0 marks)</p> <ul style="list-style-type: none"> • no response or no response worthy of credit. <p style="text-align: center;"><u>Indicative content</u></p> <p>Ways of reducing risk of injury in delivery</p> <p>(AO1 = numbered points & AO2 = bullet points)</p> <p>1. risk assessment/maintenance/replacement of machines/equipment</p> <ul style="list-style-type: none"> • e.g. checking treadmill before the start of each training session • e.g. replace exercise mats that are worn/display an out of use/faulty sign on treadmill • e.g. stack step up boxes out of the way • DEV. ensure all equipment /machines/stations are safe distance from each other • e.g. rowing machine a safe distance from the treadmill 		

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	<p>2. monitoring and addressing potential hazards</p> <ul style="list-style-type: none"> • e.g. clean floor so not slippery/rough/use mats for hard floor / wipe up any spillages/water • e.g. ensure all litter/bags are put away to prevent slipping/tripping • DEV. make sure not too many people/crowded • e.g. one person to a machine <p>3. Supervision of participants</p> <ul style="list-style-type: none"> • DEV. teach correct use of equipment/proper technique • e.g. induction session demonstrating safe use of equipment • DEV. proper warm up/cool down • e.g. suitable description of warm up/cool down • DEV. make sure everyone following rules/protocols • e.g. posters displaying correct technique/rules <p>4. instructions/advice on training might change based on risk assessment of participant</p> <ul style="list-style-type: none"> • e.g. some training may not be suitable depending upon health/fitness/illness/injury/medical conditions identified • DEV. appropriate goal setting required • e.g. use of SMART principle • DEV. realistic and achievable goals will consider starting point of the participant • e.g. ensuring participants are not doing too much/over-exerting themselves • DEV. if base level of fitness not good, then training programme will aim to <u>gradually</u> improve this. 		

Section B			
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	<ul style="list-style-type: none"> • e.g. not lifting weights which are too heavy at first; not working at too high intensity <p>Influence of participants health, fitness and wellbeing (AO3)</p> <p>5. there is more risk of injury where participants' general health is poor</p> <ul style="list-style-type: none"> • DEV. they might be physically weaker • DEV. because they exercise less, they're less able to cope with exercise/body just not ready for exercise • e.g. underlying condition makes them susceptible to injury <p>6. there is more risk of injury where participants' fitness is poor</p> <ul style="list-style-type: none"> • DEV. muscles less strong so may not cope with intensity of exercise • e.g. more likely to pull muscles/sprain/strain • DEV. can lead to lack of balance/co-ordination/agility/flexibility • e.g. could make wrong decisions or injure/hurt themselves falling <p>7. there is more risk of injury where participants' wellbeing is poor</p> <ul style="list-style-type: none"> • DEV. could lead to lack of motivation • E.g. may not be trying properly and injure through incorrect technique • DEV. can mean less concentration/focus • E.g. could do something wrong/not listen to 		

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Question	Answer	Marks	Guidance
	<p>instructions and get injured</p> <ul style="list-style-type: none">• DEV. could result in lack of confidence• E.g. may not regularly attend so don't improve fitness• E.g. low self-esteem leading to incorrect technique		

Assessment Objectives (AO) grid

Question	AO1		AO2	AO3		(Use of data)	Total
Section A		(Knowledge only)		Analysis	Evaluation		
1			1				1
2	2						2
3 (a)		2					2
3 (b)		2					2
4			1				1
5		1					1
6		1					1
7				1			1
8			1				1
9		1					1
10	2		1				3
11		1		1			2
12		1					1
13		3					3
14			2				2
15				1			1
16		1					1
17		1					1
18		1					1
19			1				1
20			1				1
Section B							
21 (a)				3		(3)	3
21 (b)			2				2
21(c)					5		5
22 (a)	4						4
22 (b) i			3				3
22 (b) ii			3				3

Question	AO1		AO2	AO3		(Use of data)	Total
23 (a)			2		2		4
23 (b)*	2		2	2			6
Total	10	15	20	8	7	(3)	60
	25			15			

* = Assessment of extended response

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