

## **Physical Education**

General Certificate of Secondary Education **GCSE 1970**

General Certificate of Secondary Education **GCSE 1971**

General Certificate of Secondary Education (Short Course) **GCSE 1071**

Entry Level Certificate **ELC 3980**

## **Mark Schemes for the Components**

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**June 2006**

**1970/71/3980/MS/R/06**

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### **MARK SCHEMES FOR THE COMPONENTS**

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**Mark Scheme 1970/01**  
**June 2006**

**SECTION A**

Q1	<b>If a performer does not eat enough food, how could that affect performance?</b>	
	<b>One mark for each correct response</b>	
	Any response related to any of the food constituents and lack of energy, goodness etc Answers need to relate to reduce performance.	MAX 1
Q2	<b>More older people are now taking part in physical activity. Identify one social reason for this.</b>	
	<b>One mark for one correct response</b>	
	<i>Meet new friends</i> <i>Go with friends</i> <i>Leisure activity</i> <i>Something to do with your time (hobby)</i>	MAX 1
Q3	<b>How can the image of a physical activity affect an individual's participation in that physical activity?</b>	
	<b>One mark for one correct response.</b>	
	May be fashionable/popular – encourages participation May be too fashionable – discourages participation Rough / tough image may encourage / discourage “Nice” image / <i>role model</i> may encourage / discourage Image may be determined by “class” and affect participation. <i>Exciting, financial rewards</i>	MAX 1
Q4	<b>Identify one advantage that voluntary clubs and associations can give to somebody who wants to start participating in physical activity.</b>	
	<b>One mark for one correct response</b>	
	Choice / access Availability (in locality) Facilities / equipment provided – little cost Make friends Run for benefit of its members Could be cheap / <i>may be free</i> <i>Coaching, improving skills, fitness, health</i>	MAX 1
Q5	<b>Give two different ways that unemployment can affect participation in physical activity.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Not enough money, cannot afford it etc Become lazy, lose motivation May encourage participation – more time May join clubs / teams in leagues set up for unemployed Cheap rates at local facilities may encourage participation.	1 1, 1 1 1 1 MAX 2

Q6	<b>Explain why performers who have a physical disability can now easily take part in physical activity.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Society in general more accepting, aware Easier access to venues, increasing funding Public transport more accessible Increase availability Times specifically for disabled, <i>adapted rules</i> Increase coverage of Para-Olympics <i>promote participation</i> / World Championships Role models Improved technology, <i>improved equipment, improved facilities</i> <i>Specialist coaches</i> <i>Psychological benefits of being with other disabled</i> <i>Increased opportunity for career</i>	1, 1 1, 1 1 1 1, 1 1 1 1,1,1 1 1 1 1 MAX 3
Q7	<b>An increased heart rate benefits performers in a training session. Identify three benefits of this increase in heart rate.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Increase blood flow to muscles / <i>to body</i> , increase Cardiac Output <u>Faster</u> and <u>more</u> delivery of oxygenated blood <u>Faster</u> and <u>more</u> delivery of blood nutrient <u>Faster</u> and <u>more</u> removal of CO <sub>2</sub> , lactic acid, waste products Higher blood pressure Able to keep going for longer.	1, 1 1, 1 1, 1 1, 1, 1 1 1 MAX 3
Q8	<b>Explain why the performer who is totally focused when participating in physical activity may have an advantage over someone who is less focused.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Clear mind off everything but activity, <i>more alert</i> Concentrate on tactics Mental rehearsal of skills Able to apply game plans / strategies Performance is likely to be better, <i>more chance of winning</i> More likely to attain personal high standard / excel More likely to make correct decisions / do the right thing. <i>More competitive (reaction time, components of fitness etc)</i> <i>Psychological benefits if applied.</i> <i>Negative perspective exemplar – less focused, may result in injury</i>	1, 1 1 1 1 1, 1 1 1 1 1 1 MAX 3

Q9	<b>Give two different ways in which age can affect a performer's stamina.</b>	
	<b>Two marks, one mark for each correct response</b>	
	<p>Exemplar:          Young child is unable to keep going, needs lots of breaks          Young adult may have high levels of endurance – keep going          Older adult – tires quickly, cannot keep going – stops.  <b>Accept opposites, young = more stamina, old = less stamina          (2 marks)</b></p>	<p>1          1          1            MAX 2</p>
Q10 (i)	<b>Give two different ways a performer may receive a cut injury when participating in physical activity</b>	
	<b>Two marks, one mark for each correct response</b>	
	<p>Exemplar:          Body contact, impact, clash of heads          Contact with equipment – studs, hockey stick, squash racket etc          Fall on to hard ground, glass on pitch etc.</p>	<p>1,1,1          1,1,1          1,1          MAX 2</p>
(ii)	<b>What is the correct treatment for a cut.</b>	
	<b>Two marks, one for each correct response</b>	
	<p>Raise injured part if possible / if needed          Gently clean cut          Dress the cut          Plaster / bandage (depending on severity)          Possible hospital treatment.  <b>(RICE – any reference without application is not accepted)</b></p>	<p>1          1          1          1          1          MAX 2            (2+2=4)</p>



## QUESTION B1

(a)	<b>Why are red blood cells important to the performer in physical activity?</b>	
	<b>One mark for one correct response</b>	
	Red blood cells transport oxygen Keep us alive Allows us to take part in physical activity.	1 1 1 MAX 1
(b)	<b>Hearing and seeing help a performer to make decisions during physical activity. Give one example of when each is used.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Exemplar: Hearing team mate shout for a pass / warn they are being marked / hearing the coaches instructions etc Exemplar: See the flight of the shuttle, ball etc, position of the opposition / team mates, position of the sun etc.	1 1 MAX 2
(c)	<b>Identify four different ways a performer's, respiratory system may be improved as a result of regular training.</b>	
	<b>Four marks, one mark for each correct response</b>	
	Increased lung capacity Increased vital capacity: the volume of O <sub>2</sub> inhaled is increased, + volume of CO <sub>2</sub> exhaled Increased <i>tidal</i> volume: allows more air into the lungs and therefore more O <sub>2</sub> into blood and delivered more quickly into the lungs (gaseous exchange) Remove CO <sub>2</sub> more quickly Breathing recovery rate is speeded up with training Increase minute ventilation <i>Increased capillarisation</i> Increase max V O <sub>2</sub>	1 1, 1 1 1 1 1 1 1 1 1 MAX 4
(d) (i)	<b>Identify two benefits for a performer who attends extra-curricular (lunch-time and after school) practices.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Improve skills / <i>maintain skill level</i> / <i>learn new skills</i> Improve stamina / <i>fitness</i> / <i>components of fitness</i> / <i>health</i> More practice, <i>more knowledge</i> Make new friends / develop friendships. <i>Representing school teams etc</i> <i>Extra coaching</i>	1 1 1, 1 1 1 1 MAX 2

(ii)	<b>Briefly explain why the National Curriculum has a good influence on participation in physical activity</b>	
	<b>Three marks, one mark for each correct response</b>	
	Provides opportunities to take part in physical activity Provides a variety of different activities, <i>equal opportunities</i> Compulsory to age 16 years, may encourage post 16 participation Trained staff Schools have excellent equipment / facilities / Sports Colleges Learning new games	1 1, 1 1 1 1 1 1 1  MAX 3
(e) (i)	<b>Identify three different basic abilities vital for participation in one named physical activity.</b>	
	<b>Three marks, one mark for each correct response</b> Three of: Speed Agility Co-ordination Flexibility Balance Reaction Time.	MAX 3
(ii)	<b>Describe a situation when each of the abilities you have listed would be important to performance in the physical activity named in (e)(i) above.</b>	
	<b>Three marks, one mark for each correct response.</b>	
	Dependant on the activity, award marks for correct application of named ability Exemplar: Activity: Basketball Ability: Co-ordination Situation: When being passed a ball, the performer needs good co-ordination to catch the ball in order to guarantee possession Ability: Balance Situation: When jumping to catch a ball, when you land you need to have good balance so you do not get called for travelling Ability: Flexibility Situation: If passed a bad ball you might have to arch backwards or reach high in order to catch a ball.	1  1  1  MAX 3 3+3=6

(f)	(i)	<b>Briefly explain how muscles produce movement.</b>	
		<b>three marks, one mark for each correct response</b>	
		Muscle works by contracting / relaxing: <i>Tendon pulls the bone / work as levers</i> <i>Tendon attached to bone</i> Muscles work in pairs (antagonistic) Helped by the synergist	1 1 1 1 1  MAX 3
(f)	(ii)	<b>Regular training makes muscle more efficient. For example, a performer's speed may be increased. This would give the performer a better chance of beating an opponent to the ball or sprinting to reach a drop shot return in badminton.</b>	
		<b>Identify two other components of fitness and explain how training each may benefit the performer.</b>	
		<b>Four marks, one mark for each named component, and one mark for explained benefits</b>	
		Answers should be related to components of fitness: strength, stamina, suppleness (flexibility) – NOT SPEED Exemplar: Strength: Muscles can be trained to improve strength. In rugby being able to withstand a tackle / knock an opponent to the ground etc allows performer to overpower which is an advantage.  Flexibility: flexibility allows a greater range of movement around the joint. Good flexibility reduces stress at the joint and can minimise injury / allow the performer to reach down low e.g. retrieve a shuttlecock.  Stamina <i>and/or local muscular endurance</i> : trained muscle may allow the performer to last longer, for the competitor to use the oxygen efficiently, raise tolerance to Lactic acid, efficient removal of CO <sub>2</sub> etc.  Local muscular endurance – will allow performers muscles to perform repeated contractions. Helpful to water polo players who need to work hard for long periods of time during the game.	1, 1  1, 1  1, 1  1, 1  MAX 4  <b>TOTAL 25</b>

## QUESTION B2

(a)	<b>Identify one way a performer's body shape may change as a result of regular physical activity.</b>	
	<b>One mark for one correct response</b>	
	Leaner / lost fat / look thinner More toned Look like a triangle Bulky Mesomorph.	MAX 1
(b)	<b>The table below shows the times that performers of different ages took to run 100 metres as part of a fitness test.</b>	
(i)	<b>Who was the slowest runner?</b>	
	<b>One mark for one correct response</b>	
	Jonathan	MAX 1
(ii)	<b>How old was the person who ran fastest?</b> 30 years / 30	MAX 1
(iii)	<b>Identify three possible reasons why this person was the fastest.</b> Why Raj ran fastest (physical reasons) Three marks, one mark for each correct response  Training – Physical Training – Technical Maturity – Raj at age 30 will be close to his physical peak – Training – effects of long term training – Components of fitness – strength / flexibility / speed mature and trained, – <i>experience of event</i> – Ability to contract powerfully / optimally – <i>Somatotype</i> – <i>Hereditary</i> – <i>Most fast twitch muscle fibres</i>  Candidates may also respond from a negative perspective – Children's musculature immature – Older performers muscular system in decline – Training levels reduced / stopped.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  MAX 3

(c)	<b>Describe why a warm up and cool down are important in physical activity.</b>	
<b>Five marks, one mark for each correct response</b>		
	<p>Warm up</p> <ul style="list-style-type: none"> <li>- Warm muscles up, raise O<sub>2</sub> uptake</li> <li>- to prepare the body / muscles for physical exercise, reduce possibility of injury/ helps avoid injury</li> <li>- Redirecting of blood to working muscles</li> <li>- to raise the pulse rate</li> <li>- to warm joints / mobilise / loosen joints / flexibility</li> <li>- to rehearse skills</li> <li>- to mentally focus</li> <li>- extends participation / reduce fatigue</li> <li>- extend onset of lactic acid production.</li> </ul> <p>Cool down</p> <ul style="list-style-type: none"> <li>- to gradually lower heart rate, breathing rate</li> <li>- to promote <i>continued</i> blood flow</li> <li>- to remove lactic acid (<b>not to prevent</b>) / metabolites, repay O<sub>2</sub> debt</li> <li>- to reduce muscle soreness / stiffness, allow future participation (<i>aids recovery</i>)</li> <li>- to return the body to resting / relax muscles</li> <li>- to prevent pooling.</li> </ul>	<p>1, 1,</p> <p>1, 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1, 1</p> <p>1, 1</p> <p>1, 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>4/1, 1/4</p> <p>MAX 5</p>

(d) (i)	<b>Briefly describe one exercise that, when performed correctly, will improve flexibility of the hamstring muscle group.</b>	
<b>Two marks, one mark for each correct response</b>		
	<p>Exemplar: seated toe touching                  In seated position, legs straight (1), slowly slide hands down legs until a stretch is felt (1), hold the position (1), slowly return to original position (1)</p> <p>Other correct exercises include                  Standing stretch – finders under toes, knees bent etc                  Single leg stretch                  Hurdle stretch                  Using a door frame – single leg stretch.</p> <p><b>Sit and reach test not accepted unless they mention that it is repeated.</b></p>	<p>Sub                  MAX 2</p>

(ii)	<p><b>Active and passive stretching may be used as part of a flexibility programme.</b></p> <p><b>Briefly describe active stretching and passive stretching.</b></p>	
	<b>Two marks, one mark for each correct response</b>	
	<p>Active stretching: stretching carried out by performer without assistance, not bouncing, gently ease in to stretch</p> <p>Passive stretching: stretching carried out with assistance, performer completely relaxes.</p>	<p>1</p> <p>1</p> <p>MAX 2</p>
(e)	<p><b>Describe why a general exercise programme may be different from a programme designed for a specific physical activity.</b></p>	
	<b>Seven marks, one for each correct response</b>	
	<p>General fitness programme may be:</p> <p><i>Suitable for all</i></p> <p><i>Could be used as a leisure activity</i></p> <p><i>Tends not to be as serious</i></p> <p><i>Not as regular</i></p> <p><b>More varied activities / exercise / not specific</b></p> <p>To lose weight</p> <p>To feel good</p> <p>Fitness</p> <p>To look good</p> <p>To be healthy</p> <p>As part of medical need etc.</p> <p>Activity specific programmes:</p> <ul style="list-style-type: none"> <li>- Designed to gain fitness for the activity, overload if applied</li> <li>- Fitness components to be addressed</li> <li>- Learn new skills / develop new skills / practice skills</li> <li>- Tactics and strategies developed</li> <li>- Vary accordingly to time of year e.g. when competition is due /, indoor / outdoor training / quality of opponent / competition etc.</li> </ul>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1, 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1/6, 6/1</p> <p>MAX 7</p> <p><b>TOTAL 22</b></p>

## QUESTION B3

(a)	<p><b>Look at the picture of a PE lesson (on page 12).</b></p> <p><b>Identify four different hazards shown in the picture and explain one risk that could result from each of these hazards.</b></p>	
	<b>Four marks, one for each correct response</b>	
	<p>Bench leaning on wall  Staff talking + drinking coffee  Door open  Pupil not in proper kit  2 activities going at the same time  Pupil under the basket, playing badminton.  Loose basketball</p>	<p>1  1  1  1  1  1  1  MAX 4</p>
	<b>Identification of risk from stated hazard</b>	
	<b>Four marks, one mark for each correct response</b>	
	<p>Candidates response must be related to the identified hazard  Pupils would not be properly supervised.</p> <p>Exemplar:</p> <p>Bench leaning on the wall – performers may not see the bench and could run into it causing an injury / performance may have to stop as bench causes an obstruction.</p>	<p>MAX 8</p> <p><b>TOTAL 8</b></p>





**Mark Scheme 1971/01**  
**June 2006**

**SECTION A**

Q1	<b>If a performer does not eat enough food, how could that affect performance in Games?</b>	
	<b>One mark for each correct response</b>	
	Any response related to any of the food constituents and lack of energy, goodness etc Answers need to relate to reduce performance.	MAX 1
Q2	<b>More older people are now taking part in Games. Identify one social reason for this.</b>	
	<b>One mark for one correct response</b>	
	<i>Meet new friends</i> <i>Go with friends</i> <i>Leisure activity</i> <i>Something to do with your time (hobby)</i>	MAX 1
Q3	<b>How can the image of a Game affect an individual's participation in that Game?</b>	
	<b>One mark for one correct response.</b>	
	May be fashionable/popular – encourages participation May be too fashionable – discourages participation Rough / tough image may encourage / discourage “Nice” image / <i>role model</i> may encourage / discourage Image may be determined by “class” and affect participation. <i>Exciting, financial rewards</i> <i>Gender concerns</i>	MAX 1
Q4	<b>Identify one advantage that voluntary clubs and associations can give to somebody who wants to start participating in Games playing.</b>	
	<b>One mark for one correct response</b>	
	Choice / access Availability (in locality) Facilities / equipment provided – little cost Make friends Run for benefit of its members Could be cheap / <i>may be free</i> <i>Coaching, improving skills, fitness, health</i>	MAX 1

Q5	<b>Give two different ways that unemployment can affect participation in Games playing.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Not enough money, cannot afford it etc Become lazy, lose motivation May encourage participation – more time May join clubs / teams in leagues set up for unemployed Cheap rates at local facilities may encourage participation.	1 1, 1 1 1 1 MAX 2
Q6	<b>Explain why players who have a physical disability can now easily take part in Games playing.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Society in general more accepting, aware Easier access to venues, increasing funding Public transport more accessible Increase availability Times specifically for disabled, <i>adapted rules</i> Increase coverage of Para-Olympics <i>promote participation / World Championships</i> Role models Improved technology, <i>improved equipment, improved facilities</i> <i>Specialist coaches</i> <i>Psychological benefits of being with other disabled</i> <i>Increased opportunity for career</i>	1, 1 1, 1 1 1 1, 1 1 1 1,1,1 1 1 1 MAX 3
Q7	<b>An increased heart rate benefits Games players in a training session. Identify three benefits of this increase in heart rate.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Increase blood flow to muscles / <i>to body</i> , increase Cardiac Output <u>Faster and more</u> delivery of oxygenated blood <u>Faster and more</u> delivery of blood nutrient <u>Faster and more</u> removal of CO <sub>2</sub> , lactic acid, waste products Higher blood pressure Able to keep going for longer.	1, 1 1, 1 1, 1 1, 1, 1 1 1 MAX 3



## QUESTION B1

(a)	<b>Why are red blood cells important to a Games player?</b>	
	<b>One mark for one correct response</b>	
	Red blood cells transport oxygen Keep us alive Allows us to take part in Games.	1 1 1 MAX 1
(b)	<b>Hearing and seeing help a performer to make decisions during Games. Give one example of when each is used.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Exemplar: Hearing team mate shout for a pass / warn they are being marked / hearing the coaches instructions etc Exemplar: See the flight of the shuttle, ball etc, position of the opposition / team mates, position of the sun etc.	1 1 MAX 2
(c)	<b>Identify four different ways a player's, respiratory system may be improved as a result of regular training.</b>	
	<b>Four marks, one mark for each correct response</b>	
	Increase lung capacity Increased vital capacity: the volume of O <sub>2</sub> inhaled is increased, + volume of CO <sub>2</sub> exhaled Increased <i>tidal</i> volume: allows more air into the lungs and therefore more O <sub>2</sub> into blood and delivered more quickly into the lungs (gaseous exchange) Remove CO <sub>2</sub> more quickly Breathing recovery rate is speeded up with training Increase minute ventilation <i>Increased capillarisation</i> Increase max V O <sub>2</sub>	1 1, 1 1 1 1 1 1 1 1 1 MAX 4
(d) (i)	<b>Identify two benefits for a player who attends extra-curricular (lunch-time and after school) practices.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Improve skills / <i>maintain skill level / learn new skills</i> Improve stamina / <i>fitness / components of fitness/ healthy</i> More practice, <i>more knowledge</i> Make new friends / develop friendships. <i>Representing school teams etc</i> <i>Extra coaching</i>	1 1 1, 1 1 1 1 MAX 2

(ii)	<b>Briefly explain why the National Curriculum has a good influence on participation in Games.</b>	
	<b>Three marks, one mark for each correct response</b>	
	Provides opportunities to take part in Games Provides a variety of different activities, <i>equal opportunities</i> Compulsory to age 16 years, may encourage post 16 participation Trained staff Schools have excellent equipment / facilities / Sports Colleges Learning new games	1 1, 1 1 1 1 1 1 1
		MAX 3
(e)	(i) <b>Identify three different basic abilities vital for participation in one named Game.</b>	
	<b>Three marks, one mark for each correct response</b> Three of: Speed Agility Co-ordination Flexibility Balance Reaction Time.	
		MAX 3
	(ii) <b>Describe a situation when each of the abilities you have listed would be important to performance in the Game named in (e)(i) above.</b>	
	<b>Three marks, one mark for each correct response.</b>	
	Dependant on the activity, award marks for correct application of named ability Exemplar: Activity: Basketball Ability: Co-ordination Situation: When being passed a ball, the performer needs good co-ordination to catch the ball in order to guarantee possession Ability: Balance Situation: When jumping to catch a ball, when you land you need to have good balance so you do not get called for travelling Ability: Flexibility Situation: If passed a bad ball you might have to arch backwards or reach high in order to catch a ball.	1     1   1
		MAX 3 3+3=6
(f)	(i) <b>Briefly explain how muscles produce movement.</b>	
	<b>three marks, one mark for each correct response</b>	
	Muscle works by contracting / relaxing: <i>Tendon pulls the bone / work as levers</i> <i>Tendon attached to bone</i> Muscles work in pairs (antagonistic) Helped by the synergist	1 1 1 1 1
		MAX 3

(f) (ii)	<p><b>Regular training makes muscle more efficient. For example, a player's speed may be increased. This would give the performer a better chance of beating an opponent to the ball or sprinting to reach a drop shot return in badminton.</b></p> <p><b>Identify two other components of fitness and explain how training each may benefit the player.</b></p>	
	<p><b>Four marks, one mark for each named component, and one mark for explained benefits</b></p>	
	<p>Answers should be related to components of fitness: strength, stamina, suppleness (flexibility) – NOT SPEED Exemplar: Strength: Muscles can be trained to improve strength. In rugby being able to withstand a tackle / knock an opponent to the ground etc allows performer to overpower which is an advantage.</p> <p>Flexibility: flexibility allows a greater range of movement around the joint. Good flexibility reduces stress at the joint and can minimise injury / allow the performer to reach down low e.g. retrieve a shuttlecock.</p> <p>Stamina <i>and/or local muscular endurance</i>: trained muscle may allow the performer to last longer, for the competitor to use the oxygen efficiently, raise tolerance to Lactic acid, efficient removal of CO<sub>2</sub> etc.</p> <p>Local muscular endurance – will allow performers muscles to perform repeated contractions. Helpful to water polo players who need to work hard for long periods of time during the game.</p>	<p>1, 1</p> <p>1, 1</p> <p>1, 1</p> <p>1, 1</p> <p>MAX 4</p> <p><b>TOTAL 25</b></p>





(c)	<b>Describe why a warm up and cool down are important in Games.</b>	
<b>Five marks, one mark for each correct response</b>		
	<p>Warm up</p> <ul style="list-style-type: none"> <li>- Warm muscles up, raise O<sub>2</sub> uptake</li> <li>- to prepare the body /muscles for physical exercise, reduce possibility of injury/ helps avoid injury</li> <li>- Redirecting of blood to working muscles</li> <li>- to raise the pulse rate</li> <li>- to warm joints / mobilise / loosen joints / flexibility</li> <li>- to rehearse skills</li> <li>- to mentally focus</li> <li>- extends participation / reduce fatigue</li> <li>- extend onset of lactic acid production.</li> </ul> <p>Cool down</p> <ul style="list-style-type: none"> <li>- to gradually lower heart rate, breathing rate</li> <li>- to promote <i>continued</i> blood flow</li> <li>- to remove lactic acid (<b>not to prevent</b>) / metabolites, repay O<sub>2</sub> debt</li> <li>- to reduce muscle soreness / stiffness, allow future participation (<i>aids recovery</i>)</li> <li>- to return the body to resting / relax muscles</li> <li>- to prevent pooling.</li> </ul>	<p>1, 1,</p> <p>1, 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1, 1</p> <p>1, 1</p> <p>1, 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>4/1, 1/4</p> <p>MAX 5</p>

(d) (i)	<b>Briefly describe one exercise that, when performed correctly, will improve flexibility of the hamstring muscle group.</b>	
<b>Two marks, one mark for each correct response</b>		
	<p>Exemplar: seated toe touching                  In seated position, legs straight (1), slowly slide hands down legs until a stretch is felt (1), hold the position (1), slowly return to original position (1)</p> <p>Other correct exercises include                  Standing stretch – finders under toes, knees bent etc                  Single leg stretch                  Hurdle stretch                  Using a door frame – single leg stretch.  <b>Sit and reach test not accepted unless they mention that it is repeated.</b></p>	<p>Sub                  MAX 2</p>

(ii)	<b>Active and passive stretching may be used as part of a flexibility programme.</b>	
	<b>Briefly describe active stretching and passive stretching.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Active stretching: stretching carried out by performer without assistance, not bouncing, gently ease in to stretch Passive stretching: stretching carried out with assistance, performer completely relaxes.	1 1 MAX 2
(e)	<b>Describe why a general exercise programme may be different from a programme designed for a specific Game.</b>	
	<b>Seven marks, one for each correct response</b>	
	General fitness programme may be: <i>Suitable for all</i> <i>Could be used as a leisure activity</i> <i>Tends not to be as serious</i> <i>Not as regular</i> <b>More varied activities / exercise / not specific</b>	1 1 1 1 1
	To lose weight To feel good Fitness To look good To be healthy As part of medical need etc.	1 1 1 1 1 1
	Activity specific programmes: – Designed to gain fitness for the activity, overload if applied – Fitness components to be addressed – Learn new skills / develop new skills / practice skills – Tactics and strategies developed – Vary accordingly to time of year e.g. when competition is due /, indoor / outdoor training / quality of opponent / competition etc.	1, 1 1 1 1 1
		1/6, 6/1 MAX 7
		<b>TOTAL 22</b>

## QUESTION B3

(a)	<p><b>Look at the picture of a PE lesson (on page 12).</b></p> <p><b>Identify four different hazards shown in the picture and explain one risk that could result from each of these hazards.</b></p>	
	<b>Four marks, one for each correct response</b>	
	<p>Bench leaning on wall  Staff talking + drinking coffee  Door open  Pupil not in proper kit  2 activities going at the same time  Pupil under the basket, playing badminton  Loose basketball</p>	<p>1  1  1  1  1  1  1  MAX 4</p>
	<b>Identification of risk from stated hazard</b>	
	<b>Four marks, one mark for each correct response</b>	
	<p>Candidates response must be related to the identified hazard  Pupils would not be properly supervised.</p> <p>Exemplar:</p> <p>Bench leaning on the wall – players may not see the bench and could run into it causing an injury / performance may have to stop as bench causes an obstruction.</p>	<p>MAX 8</p> <p><b>TOTAL 8</b></p>



**Mark Scheme 1071/01  
June 2006**

**SECTION A**

Q1	<b>If a player does not eat enough food, how could that affect performance in Games?</b>	
	<b>One mark for each correct response</b>	
	Any response related to any of the food constituents and lack of energy, goodness etc Answers need to relate to reduce performance.	(1) (MAX 1)
Q2	<b>Identify one reason a Games player might have for wanting to play against other teams.</b>	
	<b>One mark for one correct response</b>	
	Play against others of similar/higher standard; Love of competition; To improve. Win awards Enjoyment See how good they are	(1) (1) (1) (1) (1) (1) (MAX 1)
Q3	<b>Explain why good personal hygiene is good for a player's health.</b>	
	<b>One mark for one correct response</b>	
	Prevent infection/illness Prevent athletes foot / Verruca etc; Keeps cuts etc clean.	(1) (1), (1) (1) (MAX 1)
Q4	<b>Describe two possible problems a Games player may have when copying the skills of another player.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Not being guided by coach / no feedback; Not good enough to do it/not physically able to play Not followed whole, part of routine; Not able to practice it enough; It may be wrong anyway; May lead to injury; May not be useful for the team.	(1) (1) (1) (1) (1) (1) (1) (MAX 2)
Q5	<b>(a) Identify one physical activity that could be used in continuous training.</b>	
	Jogging/running Swimming Cycling Aerobics	(1) (1) (1) (1) (MAX1)
	(b) Give one physical advantage for a player who uses this continuous training method.	
	<b>Lower heart rate</b>  <b>More stamina / keep going for longer / muscular endurance</b>  <b>Maintain skill levels for longer.</b>  <b>Stronger / fitter.</b>	(1) (1) (1) (1) (MAX 1)

Q6	<b>Give two different ways that age can affect a player's stamina</b>	
	<b>Two marks, one mark for each correct response</b>	
	<p>Exemplar:          Young child is unable to keep going, needs lots of breaks          Young adult may have high levels of endurance – keep going          Older adult – tires quickly, cannot keep going – stops.  <b>Accept opposites, young = more stamina, old = less stamina</b>  <b>(2 marks)</b></p>	(MAX 2)
Q7	<b>Describe three different ways a coach can analyse performance of a Games player.</b>	
	<b>Three marks, one mark for each correct response</b>	
	<p>Observing in practice;          Observing in game situation;          Comparison with others, data analysis;          Success – passes, shots, catches, goals etc;          Video analysis / slow motion etc.</p>	<p>(1)          (1)          (1)          (1)          (1), (1)          (MAX 3)</p>
Q8	<b>An increase in heart rate benefits Games players in a training session. Identify three benefits of this increase in heart rate.</b>	
	<b>Three marks, one mark for each correct response</b>	
	<p>Increase blood flow to muscles / <i>to body</i>, increase Cardiac Output  <u>Faster and more</u> delivery of oxygenated blood  <u>Faster and more</u> delivery of blood nutrient  <u>Faster and more</u> removal of CO<sub>2</sub>, lactic acid, waste products          Higher blood pressure          Able to keep going for longer.</p>	<p>(1),(1)          (1),(1)          (1),(1)          (1),(1),(1)          (1)          (1)          (MAX 3)</p>
		<b>TOTAL</b>
		<b>15</b>

## SECTION B

B1	(a) Identify one personal reason for taking part in Games.	
	One mark	
	Enjoyment; Competition; Love playing; Rewards / awards Keep fit / healthy Lose weight Socialise	(1) (1) (1) (1) (1) (1) (1) (MAX 1)
	<b>(b) Hearing and seeing help a player to make decisions during Games. Give one example of when each is used.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Exemplar: Hearing team mate shout for a pass / warn they are being marked / hearing the coaches instructions etc Exemplar: See the flight of the shuttle, ball etc, position of the opposition / team mates, position of the sun etc.	(MAX 2)
	<b>(c) Identify one way in which a player may obtain feedback through knowledge of results.</b>	
	<b>One mark for one correct response</b>	
	Result of the game Goal being scored / point being won Judges score e.g. Judo	(1) (1) (1) (MAX 1)
	<b>(d) Identify and describe the type of motivation that keeps players of all abilities playing for many years.</b>	
	<b>Two marks, one mark for correct id. And one mark for correct explanation</b>	
	(i) Intrinsic motivation. (ii) You like it for its own sake, love it, etc; Inner desire that lasts a long time etc.	(1) (1) (MAX 2)
	<b>(e) Identify two different basic abilities that are vital for participation in one named Game</b>	
	<b>Two marks, one mark for each correct response</b>	
	(i) Two of: Speed Agility Co-ordination Flexibility Balance Reaction Time.	(MAX 2)
	<b>(ii) Describe a situation when each of the abilities you have listed would be important to performance in the Game named in (e)(i) above.</b>	
	<b>Two marks, one mark for each correct response.</b>	
	Dependant on the activity, award marks for correct application of named ability Exemplar: Activity: Basketball; Ability: Co-ordination; Situation: When being passed a ball, the performer needs good co-ordination to catch the ball in order to guarantee possession; Ability: Balance;	



	Situation: When jumping to catch a ball, when you land you need to have good balance so you do not get called for travelling; Ability: Flexibility; Situation: If passed a bad ball you might have to arch backwards or reach high in order to catch a ball.	
		(MAX 2) <b>Total 10 marks</b>

B2	<b>(a) Identify one way a player's body shape may change as a result of regular participation in Games.</b>	
	<b>One mark for one correct response</b>	
	Leaner / lose fat / look thinner More toned; Look like a triangle; Bulky; Mesomorph.	(MAX 1)
	<b>(b) Briefly describe one test that can be used to measure local muscular endurance of the arms</b>	
	<b>One mark for one correct response</b>	
	Press ups, inherently descriptive. Pull ups Chin ups	(MAX 1)
	<b>(c) The table below shows the times that players of different ages took to run 100 metres as part of a fitness test.</b>	
	Who was slowest runner?	
	One mark for one correct response	
	Jonathan.	(MAX 1)
	<b>How old was the person who ran fastest?</b>	
	<b>One mark for one correct response</b>	
	30 years / 30.	(MAX 1)
	<b>Identify two possible reasons why this person was the fastest.</b>	
	<b>Two marks, one mark for each correct response</b>	
	Why Raj ran fastest (physical reasons) Two marks, one mark for each correct response  Training – Physical Training – Technical Maturity – Raj at age 30 will be close to his physical peak – Training – effects of long term training – Components of fitness – strength / flexibility / speed mature and trained, – <i>experience of event</i> – Ability to contract powerfully / optimally – <i>Somatotype</i> – <i>Hereditary</i> – <i>Most fast twitch muscle fibres</i>  Candidates may also respond from a negative perspective – Children's musculature immature – Older players muscular system in decline – Training levels reduced / stopped.	(MAX 2)

	<b>(d) Describe why a warm up and cool down are important in Games.</b>	
	<b>Three marks, one mark for each correct response</b>	
	<p>Warm up</p> <ul style="list-style-type: none"> <li>- Warm muscles up, raise O<sub>2</sub> uptake</li> <li>- to prepare the body /muscles for physical exercise, <i>reduce possibility of injury/ helps avoid injury</i></li> <li>- Redirecting of blood to working muscles</li> <li>- to raise the pulse rate</li> <li>- to warm joints / mobilise / loosen joints / flexibility</li> <li>- to rehearse skills</li> <li>- to mentally focus</li> <li>- extends participation / reduce fatigue</li> <li>- extend onset of lactic acid production.</li> </ul> <p>Cool down</p> <ul style="list-style-type: none"> <li>- to gradually lower heart rate, breathing rate</li> <li>- to promote <i>continued</i> blood flow</li> <li>- to remove lactic acid (<b>not to prevent</b>) / metabolites, repay O<sub>2</sub> debt</li> <li>- to reduce muscle soreness / stiffness, allow future participation (<i>aids recovery</i>)</li> <li>- to return the body to resting / relax muscles</li> <li>- to prevent pooling.</li> </ul>	2/1, 1/2 (MAX 3)
	<b>(e) Active and passive stretching may be used as part of a flexibility programme.</b>	
	<b>Two marks, one mark for each correct response</b>	
	<p>Active stretching: stretching carried out by player without assistance, not bouncing; gently ease in to stretch.</p> <p>Passive stretching: stretching carried out with assistance; player completely relaxes.</p>	(1)  (1) (MAX 2)
	<b>(f) Explain why a general exercise programme may be different from a programme designed for a specific Game.</b>	
	<b>Four marks, one mark for each correct response.</b>	
	<p>General exercise programme may be:</p> <p><i>Suitable for all</i>  <i>Could be used as a leisure activity</i>  <i>Tends not to be as serious</i>  <i>Not as regular</i>  <b>More varied activities / exercise / not specific</b></p> <p>To lose weight  To feel good  Fitness  To look good  To be healthy  As part of medical need etc.</p>	

	<p>Activity specific programmes:</p> <ul style="list-style-type: none"><li>- Designed to gain fitness for the activity, overload if applied</li><li>- Fitness components to be addressed</li><li>- Learn new skills / develop new skills / practice skills</li><li>- Tactics and strategies developed</li><li>- Vary accordingly to time of year e.g. when competition is due /, indoor / outdoor training / quality of opponent / competition etc.</li></ul>	<p>1 / 3, 3 / 1 (MAX 4)</p>
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B2	<b>Look at the picture of a PE lesson.</b>	
	<b>(a) Identify three different hazards shown in the picture and explain one risk that could result from each of these hazards</b>	
	Loose basketball Bench leaning on wall Staff talking + drinking coffee Door open Pupil not in proper kit 2 activities going at the same time Pupil under the basket, playing badminton. Shiny floor	
	<b>(b) Candidates response must be related to the identified hazard Pupils would be properly supervised.</b>	
	Exemplar: Bench leaning on the wall – performers may not see the bench and could run into it causing an injury / performance may have to stop as bench causes an obstruction	Sub max marks 3 /3 <b>TOTAL 6</b>

**General Certificate of Secondary Education  
Physical Education (1970)  
June 2006 Assessment Series**

**Component Threshold Marks**

<b>Component</b>	<b>Max Mark</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>
01 Written Paper	80	67	60	54	45	36	27	18
02 Coursework	60	51	45	39	33	27	21	15
82 Coursework c/f	60	51	45	39	33	27	21	15

**Overall**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>
Overall Threshold marks	200	174	160	146	132	111	90	69	48	0

The cumulative percentage of candidates awarded each grade was as follows:

	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>	<b>Total No. of Cands</b>
	4.63	18.77	40.89	64.68	87.55	96.44	98.90	99.72	100	18486

18486 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see;  
[www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp](http://www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp)

Statistics are correct at the time of publication

**General Certificate of Secondary Education (Short Course)  
Physical Education (Games) (1071)  
June 2006 Assessment Series**

**Component Threshold Marks**

<b>Component</b>	<b>Max Mark</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>
01 Written Paper	50	37	32	27	24	21	18	15
02 Coursework	60	51	45	39	33	27	21	15
82 Coursework c/f	60	51	45	39	33	27	21	15

**Overall**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>
Overall Threshold marks	200	172	154	136	119	103	87	71	55	0

The cumulative percentage of candidates awarded each grade was as follows:

	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>	<b>Total No. of Cands</b>
	1.29	5.78	20.26	41.55	64.63	81.72	90.66	96.39	100	2024

2024 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see;  
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**General Certificate of Secondary Education  
Physical Education (Games) (1971)  
June 2006 Assessment series**

**Component Threshold Marks**

<b>Component</b>	<b>Max Mark</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>
01 Written Paper	80	67	60	54	45	36	27	18
02 Coursework	60	51	45	39	33	27	21	15
82 Coursework c/f	60	51	45	39	33	27	21	15

**Overall**

	<b>Max</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>
Overall Threshold marks	200	174	160	146	132	111	90	69	48	0

The cumulative percentage of candidates awarded each grade was as follows:

	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>U</b>	<b>Total No. of Cands</b>
	2.15	10.02	27.32	51.53	80.03	94.41	98.45	99.62	100	9804

9804 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see;  
[www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp](http://www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp)

Statistics are correct at the time of publication



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