

# Physical Education

Advanced GCE A2 7875

Advanced Subsidiary GCE AS 3875

## Mark Schemes for the Units

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**June 2007**

**3875/7875/MS/R/07**

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### Advanced Subsidiary GCE Physical Education (3875)

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**Mark Scheme 2562  
June 2007**

## Section A

## Application of Anatomical and Physiological Knowledge to Improve Performance

1 (a) (i) Use Fig 1 to help you complete the following movement analysis.

**4 marks maximum**

[4]

Elbow joint during flexion.

- 1 Type of joint: Hinge
- 2 Articulating bones: Humerus, radius, ulna
- 3 Agonist muscle: Bicep brachii
- 4 Antagonist muscle: Tricep brachii

(ii) **During the pull up exercise carbon dioxide is transported to the lungs. Identify two ways in which carbon dioxide is carried in the blood during this exercise.**

**2 marks maximum (accept first two answers only).**

[2]

- 1 Carried in plasma
- 2 Combines with haemoglobin/HbCO<sub>2</sub>
- 3 Forms carbaminohaemoglobin
- 4 Dissolves in water/forms carbonic acid/forms H<sub>2</sub>CO<sub>3</sub>
- 5 In plasma dissociates to hydrogen ions/bicarbonate ions

(b) (i) **Use Fig 2 to help you complete the following movement analysis of the spine during extension.**

**2 marks maximum.**

[2]

- 1 Agonist: erector spinae/trapezius/sacrospinalis
- 2 Antagonist: rectus abdominus/external obliques/internal obliques

(ii) **Identify an exercise for each of the following muscles which could be included in a strength training programme.**

**2 marks maximum.**

[2]

- 1 Biceps femoris: Leg curl/hamstring curl
- 2 Gastrocnemius: Calf Raises/heel raise

- (iii) The muscle fibre type that would be used during a maximal strength contraction is fast glycolytic (type 11b). Give one structural and one functional characteristic of this fibre type.

2 marks maximum.

[2]

Structural (1 mark sub maximum)

Structural characteristic	Fast glycolytic (type 11b)
1 Size	Large
2 Colour	White
3 Glycogen Store	Large
4 Sarcoplasmic reticulum development	Great
5 Myelin sheath	Thick
6 Myosin ATPase activity	Fast
7 Motor neurone size	Large
8 Fibres per motor neurone	Many
9 Phosphocreatine store/ATP stores	Large/high
10 Mitochondria	Few
11 Capillaries	Few
12 Myoglobin stores	Low

Functional (1 mark sub maximum)

Functional characteristic	Fast glycolytic (type 11b)
13 Force production	High
14 Relaxation time	Fast
15 Contractile speed	High
16 Fatigue resistant	Low
17 Aerobic capacity	Low
18 Anaerobic capacity	High

- (iv) Apply Newton's 3 Laws of Motion to a strength training exercise.

3 marks maximum (no application no marks)

[3]

- (Law of Inertia/Newtons' 1<sup>st</sup> Law) Weight/performer will not move unless force applied
- (Law of Acceleration/ Newtons' 2<sup>nd</sup> Law) More force applied greater weight lifted/weight lifted more quickly/athlete must apply force at end of lift to control weight/more weight lifted requires more force to be applied
- (Law of Reaction/ Newtons' 3<sup>rd</sup> Law) Performer pushes against resistance/weight and force applied back against performer

2 (a) With reference to the mechanics of breathing describe how the cyclist is able to inspire great amounts of oxygen during the training ride.

2 marks maximum

[2]

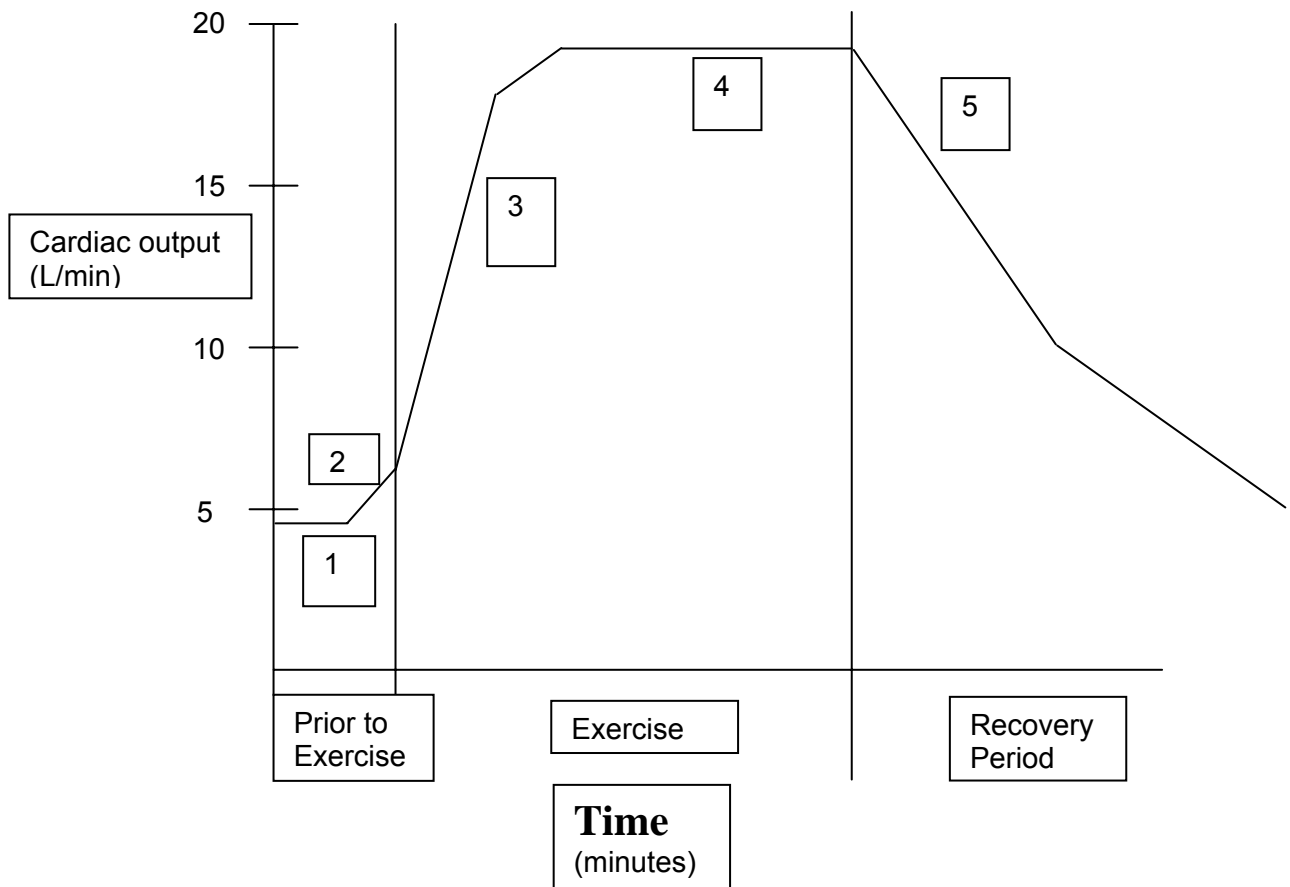
- 1 External intercostals muscles contract with more force
- 2 Diaphragm contracts/flattens
- 3 More muscles involved/pectoralis minor/sternocleidomastoid/scalenes/trapezius
- 4 Rib cage lifted further up **and** out
- 5 Pressure of thoracic cavity is decreased
- 6 Volume of thoracic cavity increased

(b) Draw a graph to show how the cyclist's cardiac output changes in the following phases of the aerobic training session.

Prior to exercise  
 Exercise Session  
 Recovery period

(One mark must be from three areas to attain maximum)

[4]



- 1 Resting value 5L/min approx (4-6L/min)
- 2 Anticipatory rise before exercise
- 3 Sharp increase
- 4 Plateau between 10-20L/min
- 5 Initial sharp decline with slow decline towards resting level

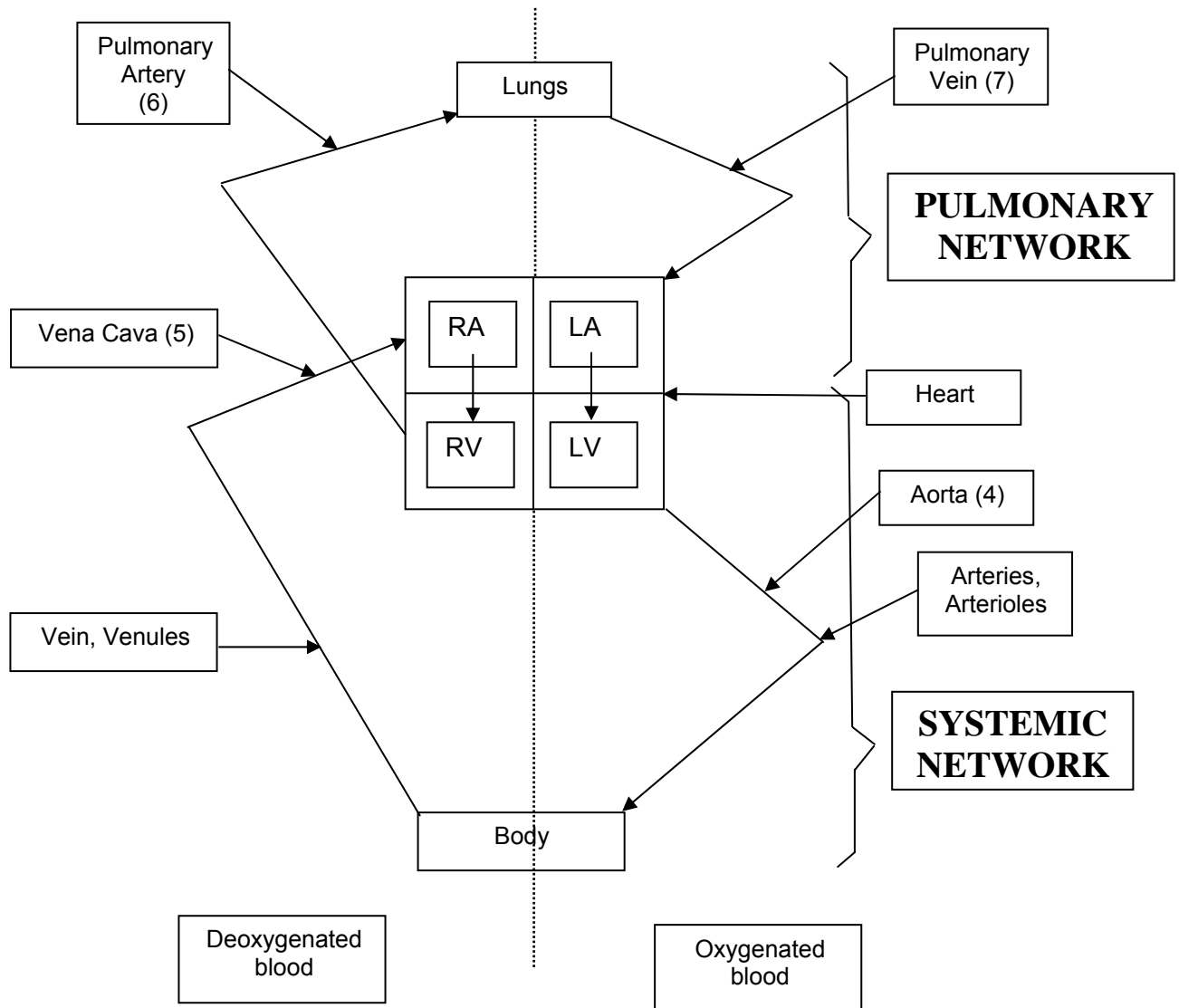


(c) Draw and label a diagram to show how the blood flows through the pulmonary and systemic networks of the cyclist's body during the training ride.

4 marks maximum (direction of flow must be indicated)

[4]

- 1 Label two networks correctly
- 2 Heart correctly labelled – right atrium, right ventricle, left atrium, left ventricle
- 3 Oxygenated and deoxygenated blood identified
- 4 Aorta leaving left ventricle and travelling to the body
- 5 Vena Cava from body to right atrium
- 6 Pulmonary artery leaving right ventricle to lungs
- 7 Pulmonary vein from lungs to left atrium
- 8 Blood vessels labelled (must have 3) arteries, arterioles, capillaries, venules, veins



RA = Right Atrium  
 LA = Left Atrium  
 RV = Right Ventricle  
 LV = Left Ventricle

- (d) Describe how carbon dioxide is diffused from the blood into the alveoli during the training ride.

3 marks maximum

[3]

- 1 Partial pressure of carbon dioxide ( $\text{PCO}_2$ ) is higher in the blood
- 2 Partial pressure of carbon dioxide ( $\text{PCO}_2$ ) is lower in the alveoli
- 3 During exercise there is a greater pressure gradient/diffusion gradient
- 4 So faster diffusion will occur
- 5 (Exercise) results in greater diffusion (capacity) of  $\text{CO}_2$
- 6 Increased surface area for diffusion
- 7 Vasodilation within lungs/increased blood supply

- (e) Give reasons why the cyclist's performance would decrease when performing at altitude.

2 marks maximum

[2]

- 1 The partial pressure of oxygen is low
- 2 Less oxygen available in atmosphere at high altitude
- 3 Hyperventilation/increased rate of breathing/dehydration
- 4 A reduction in the diffusion gradient occurs/low DG
- 5 Haemoglobin saturation depends upon the partial pressure of oxygen
- 6 Less oxygen is carried in the blood /Haemoglobin is not fully saturated/hypoxia
- 7 Therefore less oxygen available for muscles
- 8 Fatigue sets in quicker/decrease in  $\text{VO}_2^{\text{max}}$ /early onset OBLA

- 3 (a) Use practical examples to explain the discrete, serial and continuous elements.

3 marks in total (sub maximum 2 unless examples given in all 3 areas)

[3]

- 1 (Discrete) Skills with an obvious start and finish/clear beginning and end eg forward roll/tennis serve
- 2 (Serial) Movements/a series of discrete skills that are linked together to form a sequence/a series of sub-routines performed in sequential order eg triple jump/gymnastic floor routine
- 3 (Continuous) Skills with no clear beginning and end/the end of one movement becomes the start of the next movement/skills where each movement is repeated several times to make up the whole skill eg swimming/running/cycling

- (b) (i) Explain what is meant by an S-R bond.

2 marks in total

[2]

- 1 A **link/connection** (or equ) that is made between a stimulus and a particular response.
- 2 Eg gun firing in athletics (stimulus) athlete leaving the blocks (response)/GK in football diving (response) having seen the penalty taker kick the ball (stimulus)

**(ii) What is positive reinforcement?****1 mark in total.****[1]**

Any action/stimulus/reward which increases the probability of behaviour/the action reoccurring.

**(iii) Use practical examples to explain the law of exercise, effect and readiness.****3 marks in total, must use practical examples****[3]**

- 1 (Exercise) Practice/repetition is required to (strengthen the bond) eg a swimmer attending daily training sessions to improve his tumble turns
- 2 (Effect) A satisfying outcome will strengthen the bond eg a netball shooter being successful shooting from the edge of the circle
- 3 (Readiness) The performer must be physically and/or mentally able to complete the task and strengthen the bond eg a year seven boy will be physically incapable of performing a slam dunk in basketball/a footballer will only be able to play the offside trap when she is mature enough to understand the offside rule

**(c) (i) What is variability of practice?****1 mark maximum****[1]**

Changing the practice conditions to incorporate as many different situations as possible/a method of extending schema by changing the practice conditions/extending the motor programmes in the long term memory through different practice conditions/allowing for open skills to be practiced.

**(ii) Describe massed practice.****2 marks maximum****[2]**

- 1 Repeated/continuous attempts at a skill
- 2 With few or no rest periods

**(iii) Give three advantages of using distributed practice.****3 marks maximum****[3]**

- 1 Allows for rest periods/avoid overload
- 2 Mental practice/rehearsal can occur during the breaks
- 3 Each practice session can be varied
- 4 Feedback/knowledge of results/knowledge of performance can be given in breaks
- 5 Maintains motivation/concentration/helps prevent inhibition/prevents boredom/tedium
- 6 Allows for the development of wider schema/additional skills
- 7 Helps the development of positive transfer
- 8 Allows for progression/increasingly demanding
- 9 More effective than 'massed' practice

## 4 (a) Describe three functions of feedback.

3 marks in total – mark 1<sup>st</sup> three only

[3]

- 1 Motivation/increase confidence
- 2 Detecting/correcting errors
- 3 Reinforcing correct actions/performer knows what to do
- 4 Strengthening of the S-R bond
- 5 Prevention of bad habits
- 6 Helps reduce likelihood of inhibition (drive reduction theory)

## (b) (i) Identify the characteristics of the cognitive phase of learning.

3 marks in total

[3]

- 1 Initial phase of learning
- 2 Movement is jerky/lacks co-ordination/does not flow
- 3 Performer concentrates on each part of the skill/thinks about each sub-routine
- 4 A mental picture of the skill is being created/demonstration forms mental picture
- 5 Trial and error learning/period of discovery/mistakes could be made
- 6 Relies on external feedback

## (ii) Use practical examples to describe two different types of guidance used during the cognitive phase of learning.

2 marks in total. Mark 1<sup>st</sup> two only. Must have practical examples to gain marks.

[2]

- 1 (Visual) use of demonstration eg teacher demonstrates how to perform a lay up shot
- 2 (Verbal) instructions/highlighted points used with demonstration eg teacher explaining how to perform a hockey push pass
- 3 (Manual) performer is physically placed in the correct position eg performer is supported by teacher when doing a handstand
- 4 (Mechanical) use of a device to provide support for a performer eg the use of arm bands in swimming

## (c) Use a practical example to explain attention, retention and motor reproduction.

3 marks in total (sub maximum 2 marks unless examples given in all areas)

[3]

- 1 (Attention) the amount of notice taken of the model by the learner/concentration must be paid to demonstration/the more attractive/competent/high status the model the greater the attention will be/attention span of the observer will determine the amount of attention given to the model/observer's attention needs to be drawn to important parts of the demo
- 2 (Retention) a mental picture of the demo needs to be created for use in the future so demo needs to be remembered/retention helped if demo novel/relevant/meaningful/symbolic coding/repeated
- 3 (Motor Reproduction) learner must be physically capable of performing the skill following the demo/demonstrations must link to the competence level of the performer

- (d) Explain how performers and teachers can ensure that positive transfer occurs between physical skills.

4 marks in total

[4]

- 1 Ensure similarity of skills/identical elements theory
- 2 Emphasis on the transferable elements
- 3 Environmental conditions/tactics/strategy need to be similar
- 4 Information processing/cognitive requirements need to be similar/transfer appropriate processing facilitates positive transfer
- 5 The closer the S-R bond is to the old skill the greater likelihood of transfer
- 6 Positive reinforcement/praise will encourage transfer
- 7 previous skills need to be well learned to facilitate positive transfer
- 8 Learning situations need to 'allow for' positive transfer



**Mark Scheme 2563  
June 2007**

**Quality of Language**

**Three marks are available for the quality of Written Communication.**

- High:** A well reasoned, well ordered developmental explanation.  
In clear, concise and continuous prose.  
Sentences and paragraphs follow on from one another smoothly and logically.  
There will be **few, if any, errors** of grammar, punctuation and spelling. **3 marks**
- Middle:** Reasoned statements employing **sound** use of language.  
Candidates express straightforward ideas clearly.  
Sentences and paragraphs may not always be connected.  
There may be **some errors** of grammar, punctuation and spelling, but not such as to suggest a weakness in these areas. **2 marks**
- Low:** An attempt at explanation with limited quality of language.  
The candidate expresses simple ideas clearly but may be imprecise and awkward in dealing with complex or subtle concepts.  
**Errors in grammar**, punctuation and spelling may be **noticeable** and **intrusive** suggesting weaknesses in these areas. **1 mark**



**1 (a) Identify characteristics of surviving ethnic sports. [4]****4 marks in total****4 marks of 4 of:**

1	(local)	local / unique to area / local pride
2	(rowdy)	Rowdy
3	(occasional)	occasional / annual / on public holidays
4	(social)	social / community / focus on "pub"
5	(tradition)	traditional / folklore / celebration of past / generation to generation
6	(isolation)	isolated / rural / natural / natural environment
7	(ritual)	ritual / ceremonial / celebrations / religious / festival / supernatural / medieval customs / carnival atmosphere
8	(tourism)	attract tourists or publicity / tourism / commercial

**1(b) Describe each level of the performance pyramid. [4]****4 marks in total****4 marks – one for each of:**

1.	(foundation)	learning basic skills / young or school children / school PE / introduction to sport / variety of activities / learning positive attitude to physical activity / grass roots / mass participation
2.	(participation)	school or club participation / choosing activities / recreational involvement / extra-curricular non- competitive / regular participation / for health or fitness or friendships or fun or enjoyment / hobby / leisure
3.	(performance)	school or club participation with emphasis on competition or winning / skilled / committed / train regularly / coaching / keen to improve / structured or organised / compete at district or county or regional level /
4.	(excellence)	high standard or highly skilled / "professional" / get paid / elite / national / international / fully committed / high level of coaching / science support

**1 (c) How do National Governing Bodies support performers at the top of the performance pyramid? [4]**

**4 marks in total**

**4 marks of 4 of:**

1. (selection)	select or manage national team / talent ID / select for World Class Programme (podium/development/talent)
2. (funding)	provide funding
3. (science)	provide sport science support or analysis
4. (coaching/training)	high level coaching or training / performance directors / national coach / train high performance coaches or officials / academies
5. (sponsorship/media)	seek sponsorship or develop commercial links / obtain media coverage / negotiate with media
6 (facilities / equipment)	give access to high level facilities or equipment.
7. (liaison)	Work with UK SPORT or UKSI or HCSCs eg Sp England or sports colleges or high level clubs
8. (competition)	organise or provide or inform about competitions / attract events / appoint officials
9. (doping/discipline)	provide anti-doping education / give info. about 100% ME / deal with discipline
10. (education)	encourage or support academic education / provide lifestyle or career advice

**1(d) (i) What can children learn from play?****3 marks in total****3 marks of 3 of:**

1. (physical)	physical skills / body management / motor skills
2. (reality)	about real life / master reality / roles for later life (e.g. mums and dads) / to pretend
3. (cognitive)	cognitive or mental skills or values / decision making / problem solving / make up games / how to play games / rules of games / creativity / imagination /
4. (social)	social skills / making friends / communication / team work / co-operation / caring / sharing / respect for others / to socialise
5. (leadership)	leadership / opportunities to be in charge
6. (environment)	to appreciate environment / need for safety / risk and safety
7. (moral/ emotional)	moral or emotional skills or lessons / right and wrong / how to accept defeat / coping with difficulty / fair play / not to cheat / sportsmanship
8. (self)	about themselves / emotional control / self realisation / self confidence

**(ii) When might play fail to have the characteristics of spontaneity and enjoyment? [2]****2 marks in total****2 marks of 2 of:****Sub max of 1**

1 (spontaneity stops when...)	there are arranged rules / rules are strictly followed / play is planned or organised or regular
2 (enjoyment stops when...)	children argue or get hurt or injured or they are losing or excluded / when there is: cheating or aggression or bullying or boredom / serious / competitive

**(iii) What decisions and choices do children make when playing? [4]****4 marks in total****4 marks of 4 of:**

1 (who)	who to play with / who can play / teams / groups
2 (roles)	roles to adopt / what to wear
3 (what / rules)	what to play / rules
4 (where)	where to play / space / location / boundaries
5 (when)	when to play / timings / whether or not to play
6 (equipment)	equipment to use
7 (serious)	level of seriousness
8 (activity)	level of physical activity

**2 (a) (i) What can young people gain from outdoor education?**  
**4 marks total:**

**(4)**

1. (physical skills/ values)	physical skills / e.g. camp craft or Eskimo roll or other e.g / improved health or fitness / physical or mental well being /
2. (personal skills/values)	personal skills / self awareness or development or confidence or esteem / self-realisation / a spiritual experience / knowledge of strengths and weaknesses / independence / mental strength / sense of achievement or adventure / emotional control / leadership / responsibility
3. (cognitive skills /values)	cognitive or thinking skills / decision making / problem solving / know how to overcome challenges
4. (social skills /values)	social skills / socialisation / teamwork / sharing / co-operation / communication / trust / loyalty
5. (commitment)	commitment / determination
6. (environment)	aesthetic appreciation or awareness / improved quality of life / respect or appreciation of outdoors or natural environment or nature
7. (preparation)	preparation for active leisure / preparation for career / awards or qualifications (e.g. DofE, BELA , kayak 1 star)
8. (safety)	respect for potential danger / knowledge of risk and safety / survival skills

**(ii) Not all school children have the opportunity to experience regular or varied outdoor education. Give reasons for this.**

**(3)****3 marks total:**

1. (staff)	lack of staff expertise or qualifications / expensive or specialist training needed / staff ratios
2. (funding)	lack of funding / need for voluntary contributions / cost or lack of transport
3. (risk)	teachers reluctant to take on responsibility /staff uneasy with risk factors / lack of parental consent / health and safety
4. (access)	distance from facilities
5. (time)	not enough time / restrictions on time table / pressure on curriculum / exam work
6. (facilities/ equipment)	lack of specialist or appropriate facilities or equipment / e.g. no canoes
7. (NC)	not compulsory part of NC

2(b) How can both funding and the media help to develop sporting excellence in the UK?  
(6)

6 marks total

6 marks for 6 of – sub max 4 from one section

<b>Funding</b>	
1. (professionalism)	performers can: concentrate on sport / train full time / become professional / living or transport or subsistence costs
2. (equality)	performers can compete more equally with those from better funded countries.
3. (facilities/ equipment)	provision of or money for high level or specialist facilities or equipment or clothing
4. (training / coaching )	provision of or money for high level training or coaching
5. (organisations)	fund: UK Sport / UKSI (EIS) / NGBs / H.C. councils / YST / Sports Colleges
6. (events)	attracts or provides world class events or competitions
7. (talent)	scholarships / World Class (Performance) Programme / WC(P)P / talent-development-podium or start-potential-performance / TASS / talent ID / gifted and talented
<b>Media</b>	
8. (awareness)	raises profile or awareness of sport/s / promotes sport/s
9. (role models)	positive role models / raises profile or awareness of performers
10. (sponsorship)	sponsorship / money to sport/s or performer/s
11. (rules/timings)	influence on : rules or timings or seasons or format or structure of sport
12. (dvds)	use of dvds or videos or websites
<b>Funding or Media</b>	
13. (participation)	Increases participation / mass participation / build base of performance pyramid / shatter stereotypes / money to clubs

- 2(c) Discuss sport and commercialism with reference to the 'American Dream.'  
Discuss sport and politics with reference to the 'shop window' effect. (8)

8 marks in total:

8 marks for 8 of – sub max 5 from one section

#### Sport and commercialism

1. (American Dream)	anyone can achieve success or wealth or status or upward social mobility / rags to riches / way out of poverty / everyone equal
2. (wealth)	happiness gained through wealth
3. (work)	hard work needed or rewarded
4. (opportunity)	land of opportunity / land of the free
5. (big business)	sport as business / sport or performer as commodity / sport for profit / links with or reflection of capitalism / performer as billboard
6. (winning)	win at all costs / winning of supreme importance / Lombardian ethic / individualism
7. (▲)	golden triangle / sporting links with sponsorship and or media

#### Sport and Politics

8. (shop window)	performers put on 'world stage' / country promoted / nation building / increase national pride or prestige or image / gain publicity for country / tourism
9. (example)	e.g. China, Kenya, Ethiopia, Brazil, Cuba, West Indies, Indonesia, emergent or developing countries or cultures, LEDCs
10. (politics)	sporting success reflects political success / sport used as a political tool / political stability / success reflects power of country / increase popularity of government
11. (government)	government controls or funds sport / centralised / evidence of institutionalised deviance e.g. drugs
12. (country)	performers compete for country not self / collectivism
13. (motives 1)	health, integration, defence
14. (motives 2)	appeasement / feel good factor / reduce crime / social control / societal stability
15. (strategies 1 funding / elitism)	unequal funding / disproportionate funding / funding limited to limited number of sports or performers / selection / elitism / limited range of sports / focus on top performers
16. (strategies 2 HP/LT/RM))	high profile or high coverage or Olympic sports / host Olympics / low technology or cheap or simple sports / role models

**Mark Scheme 2565  
June 2007**

- 1 (a) (i) Identify **two** characteristics of public schools and explain how each characteristic influenced the development of team games. **[2]**  
**2 marks in total**  
 2 marks for 2 of:  
 (first two marked only): must have characteristic and influence for 1 mark.

Characteristic	Influence on sports and games
1 boys	energy and enthusiasm to be channelled in to games.
2 boarding	time available
3 expansion/size	as numbers grew houses were formed which became the hub of games competitions
4 non-local	great variety of regional games adopted/adapted by schools
5 Spartan/harsh treatment	harsh treatment or living conditions prepared boys for rigours of competitive sport/violent nature of games
6 controlled by Trustees	trustees were keen to promote school/trustees keen to invest in sporting success
7 endowed	school which received large gifts of money or property could build facilities or employ more assistant masters or coaching professionals
8 fee paying	money could go towards developing facilities/money to build gymnasia/swimming baths or racquet courts etc
9 gentry	influential families brought money to develop facilities/influence on types of activities brought to the school

- (ii) Describe the role of the Sixth Form during stage two of development when Dr Thomas Arnold was Headmaster of Rugby School. **[4]**  
**4 marks in total**  
 4 marks for 4 of:

1 (responsibility)	sixth form given responsibility/status of sixth form raised
2 (social control)	sixth formers helped to establish social control
3 (role models)	some became role models or heroes/hero worship/example of Brooke from TBS
4 (discipline)	sixth form had power to discipline younger boys
5 (organisation)	sixth form central to the organisation of games/organised house games
6 (relationships)	better relationships with masters/more trusting or sympathetic/relationships/cordial relationships within school/bridging the gap between masters and pupils



(b) (i) With the help of Fig 1 and your own knowledge describe:

- mob football as a popular recreation
- football or rugby in public schools
- association football as a rational recreation.

[9]

**9 marks in total**

9 marks from 9 of: sub max 3 from any one section.

Mob football as a  <b>Popular Recreation</b>	1	local/village v village/community based
	2	uncoded/simple rules/local rules/passed on by word of mouth/simple/natural
	3	violent/uncivilised/regular deaths/not skill based
	4	occasional/often annual/irregular/on festival days or Holy days
	5	played by lower class/males/a way to show virility/manliness
	6	rural/occasionally in towns
	7	often restricted/illegal/curtailed
	8	wagering/betting on outcome
<b>Public Schools</b>	9	usually compulsory for all
	10	inter-house/inter-school matches
	11	games afternoons
	12	part of the 'games cult'/played obsessively by some
	13	thought to promote values eg courage, leadership pluck, or build character
	14	melting pot of ideas/codification
	15	development of facilities/equipment/kit
Association Football as  <b>Rational Recreation</b>	16	regional/national/international
	17	rule based Governing body rules
	18	respectable/civilised/skilful/skill not force/tactics
	19	regular/a 'season'/leagues/cups/competitions
	20	gentlemen amateur teams eg Corinthian Casuals/factory workers
	21	working class professionals
	22	urban/purpose built stadia/workers walked to the ground/spectators/improved technology
	23	playing positions/use of officials/kit (if not given under point 15)

- (ii) Explain the emergence of Association Football from mob football by referring to the influence of **changing working conditions, urban expansion and improved transport**. [6]

**6 marks in total** - see levels mark scheme

Levels marked

Level 3: **5-6** marks

- A comprehensive (usually 4 or more well developed points) answer that shows sound knowledge and understanding of **all three** influences on the development of football.
- Candidates will give a clear explanation of the emergence of the game.

Level 2: **3-4** marks

- Here candidates will show some knowledge (usually 3 or 4 developed points at the top end of this level) and will understand of societal influences on the development of football.
- They will attempt an explanation of the emergence of the game.

Level 1: **1-2** marks

- Candidates at this level will show limited/superficial knowledge and understanding of societal influences on the development of football and may visit a limited number of influences.
- Little or no explanation - the answer is likely to be descriptive.

Candidates are likely to make the following points:

<b>Changing working conditions</b>	1	factory system/regular work times
	2	reduction in working week/Sat 1/2 day/early closing movement
	3	skilled manual labour first to gain Saturday 1/2 day
	4	pro football a comparatively good job
	5	workers had more money/enough to pay the Saturday gate money
	6	broken time payments (led to professionalism)
<b>Urban expansion</b>	7	limited space/loss of space/not enough space for all to play
	8	specialist facilities developed/most towns built football grounds
	9	(potential) business opportunities in running club/appealed to middle classes
	10	large numbers of people in one place/needed something to do/captive audience
<b>Transport</b>	11	trains/trams/buses/ allowed for easy travel to away games/national fixtures
	12	allowed for regular fixtures
	13	facilitated development of spectatorism
	14	lead to need for standardised rules/formation of NGB
	15	lead to development of leagues and cups and competitions

**[Total 21 marks]**

- 2 (a) (i)** Outline two factors that make Outdoor Education an important subject in Australian High Schools. **[2]**

2 marks in total.

Mark first two only. 2 marks for:

- 1 (climate) Favourable climate for outdoor lifestyle
- 2 (landscape) Genuine wilderness/environment promotes outdoor involvement
- 3 (survival) Survival skills necessary in a country with inhospitable areas/environmental dangers require survival skills
- 4 (tradition) Outdoor experiences reflect frontierism/Bush Culture/Colonial settlement/reflection of legacy
- 5 (historical) Copy of 'Motherland' activities
- 6 (nationalism) Outdoor environment part of Australia's pride/chance to explore beauty of environment
- 7 (affluence) Population has wealth to take part in outdoor activities
- 8 (status) Outdoor education is an examined subject/Youth Development Programme/YDP.

- (ii)** Describe the Australian High Schools initiatives entitled S.E.P.E.P. and P.A.S.E. **[4]**

4 marks in total. Sub max 2 if initiatives not qualified.

Sub max 3 for description of SEPEP:

- 1 (curriculum framework) A loose curriculum framework/adaptable/teacher has choice
- 2 (time) 100 mins PE and 100 mins sport per week/compulsory time given to both PE and sport
- 3 (government) A government requirement
- 4 (content) Development of skills and sport performance/games sense
- 5 (competition) Intra schools sport/games in lesson time/Inter school sport games against other schools
- 6 (participation) Participation is the priority/excellence is a secondary consideration
- 7 (non-participants) Allows non-sporting roles/roles for children in administration/officiating/Sports leader role
- 8 (progression) Sports Linkage scheme/link between school and club.

Sub max 3 for description of PASE:

- 9 (professional development) Professional development for teachers
- 10 (training) Provides teacher training programmes/inset
- 11 (guidance) Helps teachers to work better/to improve/to be more effective.
- 12 (government) Government funding for PASE
- 13 (provider) Australian Council of Health Physical Education and Recreation/ACHPER responsible for programme delivery/design/write PASE programmes
- 14 (teacher games) Involves teacher games/promotes teachers as active role models.

- (b) (i)** In French schools what are Transplantee Classes? Describe the benefits of these classes to French school children. **[3]**

3 marks in total.

1 mark max for saying what are Transplantee Classes:

- 1 (transplanting) Taking children from the classroom to an area of outstanding beauty/scenic area
- 2 (classes) Snow/neige/forest or countryside/vert/sea/mer
- 3 (outdoor education) Primary school outdoor education programme.

2 marks sub max for benefits:

- 4 (skills) Learn practical skills/outdoor activity skills
- 5 (Skills) Learn academic skills/classroom skills/intellectual work linked to practical
- 6 (introduction) Introduction to outdoors/environment/le plein air/links to naturalism/understanding/appreciating beauty of France
- 7 (socialisation) Working with others/developing friendships
- 8 (nationalism) Promotion of national culture (enjoyment) Development of happiness/achievement
- 9 (preparation) Preparing for activity/active leisure/outdoor leisure.

- (ii)** Describe **one** of the following French initiatives, either The Union National du Sport Scholaire (UNSS) or Primary Sports Schools. **[4]**

Mark first one; 4 marks in total.

Description of the UNSS 4 marks for:

- 1 (sport provider) Provides sport for all children in school/all children are included at school
- 2 (fixtures) Organise sports fixtures/competitions
- 3 (quality) Employment of specialist coaches/coaches take responsibility from teachers
- 4 (teachers) Teachers work alongside coaches
- 5 (facilities) Community facilities/shared facilities/joint provision
- 6 (government) Government fund the UNSS
- 7 (non sports roles) Children can learn administrative skills/officiating skills
- 8 (excellence) Talented individuals are selected by UNSS/improved standards of play
- 9 (intellectualism) Children attend school on Saturday morning so Wednesday can facilitate sport

Description of Primary Schools 4 marks for:

- 10 (provision) Specialist sport provision in the Primary School
- 11 (facilities) Exceptional standard of facilities/shared with community/joint provision
- 12 (coaches) Specialist coaches work alongside teachers
- 13 (timetable) Integrated day/academic mixed with sport/extended day to accommodate sport
- 14 (single sport) Gymnastics often offered as a single sport
- 15 (multi-sport) Sometimes several sports offered eg volleyball, basketball and handball
- 16 (funding) Government funding
- 17 (selection) Non-selective/open to all
- 18 (opportunity) Opportunity to develop talent/priority not to produce champions
- 19 (intellectual) Sports involvement supplements academic work.

- (c) Describe how the Ivy League Colleges helped to develop American Grid Iron Football and explain why American Grid Iron Football is a popular sport in the USA **[8]**

8 marks in total.

Levels marks.

Level three 6-8 marks.

At the top of this level a comprehensive answer giving two reasons to describe how Ivy League Colleges helped to develop American Grid Iron Football and four developed reasons to explain why American Football is popular in the USA. The answer will show sound knowledge and understanding. Clear explanations will be given as to why American Grid Iron Football is popular.

Level two 3-5 marks

An answer usually giving a reason to describe how Ivy League Colleges helped to develop American Grid Iron Football and two/three reasons to explain why American Grid Iron Football is popular in the USA. The answer will show some evidence of knowledge and understanding.

Level one 1-2 marks

An answer showing limited/superficial knowledge and understanding of why American Grid Iron Football is popular in the USA.

Indicative Content.

Description of development brought about by Ivy League Colleges.

- 1 (rules) Formalised the rules/legalised forward pass.
- 2 (origin) First games played at Ivy League Colleges.
- 3 (adaptation) Adaptation from rugby football took place in Ivy League Colleges.
- 4 (culture) College games produced a masculine idea/violent play was a feature of the game.

Explanation as to why American Grid Iron Football is a popular sport in the USA

- 5 (nationalism) The game is American/All American game/product of isolation
- 6 (rules) Rules promote rough play and violence.
- 7 (sensationalism) Games are designed to be sensational/exciting eg padding to produce collision/they are fast/entertaining
- 8 (high scoring) Matches can be high scoring/high scoring games allow crowds to be rowdy.
- 9 (intensity) Action remains intense through tactical substitution.
- 10 (media) The media tend to hype up the games/high profile of the media.
- 11 (frontierism) Reflection of frontier/pioneer spirit.
- 12 (win ethic) Strong evidence of win at all cost/lombardianism.
- 13 (result) Winner always produced/no draws.
- 14 (culture) Nature of the game suits USA culture/eg gun culture.
- 15 (culture) The American Dream is evident in the competition.
- 16 (commercialism) The game is promoted as a business.
- 17 (spectacle) The game is part of a package/spectacle/eg cheerleading.
- 18 (ranking) Grid Iron is one of the big four games.

**[Total 21 marks]**

**Quality of Language**

**Three marks are available for the quality of Written Communication.**

- High:** A well reasoned, well ordered developmental explanation.  
In clear, concise and continuous prose.  
Sentences and paragraphs follow on from one another smoothly and logically.  
There will be few, if any, errors of grammar, punctuation and spelling. **3 marks**
- Middle:** Reasoned statements employing **sound** use of language.  
Candidates express straightforward ideas clearly.  
Sentences and paragraphs may not always be connected.  
There may be **some errors** of grammar, punctuation and spelling, but not such as to suggest a weakness in these areas. **2 marks**
- Low:** An attempt at explanation with limited quality of language.  
The candidate expresses simple ideas clearly but may be imprecise and awkward in dealing with complex or subtle concepts.  
**Errors in grammar**, punctuation and spelling may be **noticeable** and **intrusive** suggesting weaknesses in these areas. **1 mark**

- 3 (a) A highboard diver of mass 80kg jumps upwards and performs a two and a half somersaults with tuck dive before entering the water. Calculate the diver's weight and use Newton's Laws of Motion to explain how the diver would take off when executing the dive. (Assume that acceleration due to gravity is  $10\text{ms}^{-2}$ ) [6]

**6 marks in total**

**2 marks from:**

- 1  $W=mg/F=ma/W=80\times 10$
- 2  $W=800\text{N}$  (Units must be correct)

**Sub max 4 marks from:**

- 3 (Newton 1) The diver will remain stationary until an external/unbalanced/net force acts upon it
- 4 (Newton 1) For the diver to leave the board upwards, the (reaction/upwards) force must be greater than weight/ $R>W$
- 5 (Newton 2) The acceleration of the diver is directly proportional to the size of the (net) force acting upon him
- 6 (Newton 2) and the acceleration takes place in the same direction/upwards as the (net) force
- 7 (Newton 3) For every action there is an equal and opposite reaction
- 8 (Newton 3) The diver pushes **downwards** onto the board and the board applies an equal and opposite force **upwards** on the diver.

(b) During the dive, the diver experiences changes in vertical velocity. Sketch a vertical velocity/time graph showing these changes. On the graph identify:

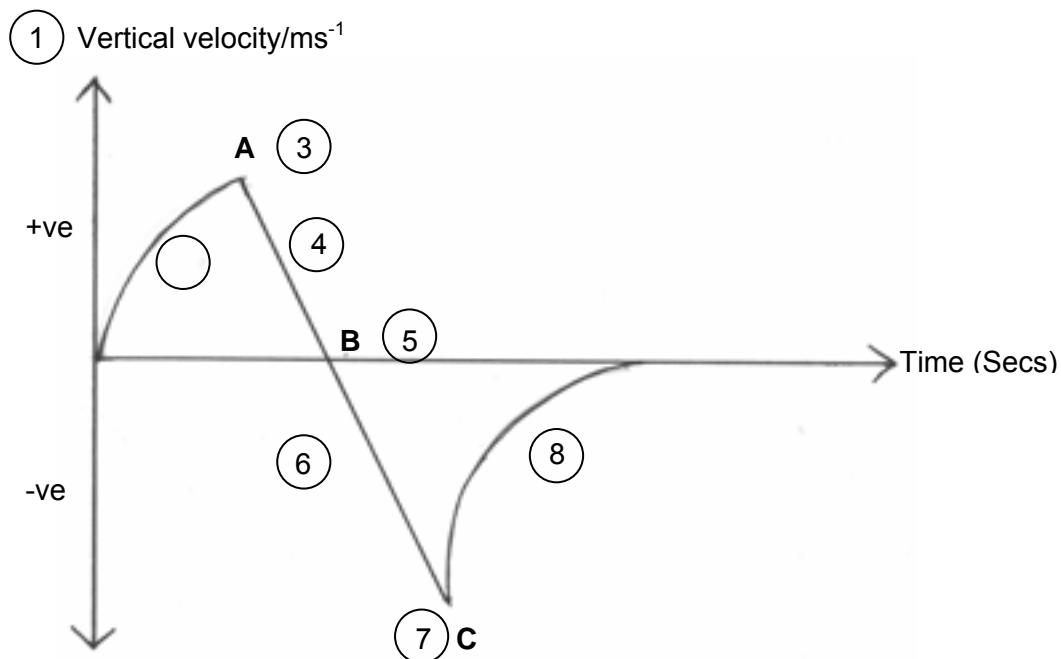
- Point A as the time at which the diver leaves the board
- Point B as the time at which the diver reaches the highest point of flight
- Point C as the time at which the diver enters the water.

[5]

5 marks in total.

**5 marks from:**

- 1 Correct axes showing vertical velocity, time (-ve/+ve velocity).
- 2 Upward acceleration before diver leaves board
- 3 Time diver leaves the board. (upward vertical velocity is greatest – point A)
- 4 Constant deceleration before diver reaches highest point
- 5 Time diver reaches highest point. (vertical velocity is zero – point B)
- 6 Constant acceleration until diver hits water
- 7 Time diver enters the water. (downward vertical velocity is greatest – point C)
- 8 Deceleration until divers vertical velocity is zero.





(c) Fig 2 shows aspects of the diver's angular motion during the dive.

(i) Identify the aspects of angular motion represented by the lines, A, B and C. [3]

**3 marks for:**

- 1 A = Angular Momentum
- 2 B = Moment of Inertia
- 3 C = Angular velocity/speed/rate of spin.

(ii) Identify the axis of rotation through which the diver rotates and use your understanding of the analogue of Newton's First Law of Motion to explain how the diver can control angular velocity before entering the water.

Levels marked question.

Level 3: 6-7 marks

Responses will fully describe the analogue of Newton 1 and correctly identify the axis of rotation. There will be a full, coherent explanation of the changes and all points made will relate to the phases of flight, although at the bottom of this level this may not be fully considered.

Level 2: 4-5 marks

Responses should define the conservation aspect of the analogue of Newton 1. Explanation should be coherent but points will be missed and phases of flight may not be fully related.

Level 1: 1-3 marks

Definition will be limited and explanation lack clarity. For the top of this level, phases of flight must be referred to.

Indicative Content.

- 1 Transverse axis of rotation.
- 2 (Analogue of Newton 1) The diver will continue to rotate with constant angular momentum.
- 3 (Analogue of Newton 1) unless acted upon by a net/external torque/moment of force.
- 4 Angular Momentum = Moment of Inertia x Angular velocity/AM = IW.
- 5 Moment of Inertia/I depends on the distribution of mass about axis of rotation.
- 6 MI is high when mass is distributed a long way from the axis of rotation/diver is straight/or opposite.
- 7 (take-off) MI is high/resistance to rotate is high.
- 8 to create lots of Angular Momentum.
- 9 therefore w/angular velocity/rate of spin is low.
- 10 (during flight) MI reduced by diver assuming the tuck position.
- 11 therefore w/rate of spin increases
- 12 due to analogue of Newton 1/law of conservation of angular momentum.
- 13 (just before entry into water) MI increased.
- 14 therefore w/rate of spin decreases
- 15 to prevent over rotation on entry.
- 16 Torque applied by water to body reduces angular motion.

NB Points 7-16 must relate to relevant phases of flight.

**[Total 21 marks]**

4 (a) Aggressive behaviour can affect performance in sport.

(i) Using practical examples, identify some of the causes of aggression in sport.

[3]

3 marks in total.

**(Sub max 2 if no practical eg)**

3 marks from:

- 1 Perceived/actual unfairness eg (refs/officials poor decisions)
- 2 Frustration eg over poor personal performance eg (having a poor game)/losing
- 3 Displaced aggression/other influences outside of sport
- 4 Hostile crowd
- 5 High expectations/pressure to perform/win/close game
- 6 Others' aggression/retaliation/copying/eg bad tackle/provocation
- 7 To be accepted in group/group pressure
- 8 Cultural determinants/it is expected
- 9 Game determinants/expected/norms in the game (ice hockey)
- 10 Personality characteristics
- 11 To intimidate/dominate opponent.
- 12 Rivalry/local derby/previous ill feeling

(ii) Using psychological theories and practical examples from sport, explain aggressive behaviour.

**Levels marked**

<b>Level 3: 5-6 marks</b>	<b>At the top of this level candidates should identify and fully explain at least 3 theories giving relevant practical examples.</b>
<b>Level 2: 3-4 marks</b>	<b>At the top of this level candidate identifies and fully explains at least two theories giving practical examples.</b>
<b>Level 1: 1-2 marks</b>	<b>Candidate describes only one theory or gives examples with no relevant psychological theories.</b>

Indicative Content.

- 1 (Instinct/nature theory) Instinct/natural/innate tendencies.
- 2 (Frustration/agg hypothesis) Frustration - aggression hypothesis/frustrating circumstances blocks your goal.
- 3 (Catharsis) To achieve catharsis/to feel better/to release frustration.
- 4 (Aggressive cue hypothesis) Aggressive cue hypothesis/signals/cues/stimuli cause aggression.
- 5 Because cue is identified with expected/desired behaviour.
- 6 (social learning/Bandura) Social learning/need to copy.
- 7 To be like significant others/role models.
- 8 Copying more likely if similar model eg same gender/age/ability
- 9 Males more likely to be physically aggressive than females
- 10 Live/realistic models more likely to be copied.
- 11 (socialisation) Socialisation/cultural norms and values determine your behaviour.
- 12 (Operant/conditioning/S-R/Associationist) Conditioned response/S-R bond that has been learned/operant conditioning.
- 13 (operant/reinforcement) You get praise/reinforcement aggression will re-occur

- (iii) Describe methods that can be used to eliminate aggressive tendencies in sport. [4]

4 marks for 4 from:

- 1 Cognitive techniques/lower psychological arousal
- 2 Count to ten/mantra/concentrate on repeating words/phases/positive self talk
- 3 Imagery/imagine calm/control/quiet place
- 4 Mental rehearsal of activity/imagining ones own actual movement
- 5 Forgetting/distancing from aggressive cues/walking away/removing yourself from situation/negative thought stopping
- 6 Displace feelings/play harder/take it out on someone/something else.
- 7 Take up an activity, which will release tension/aggression/take and interest/be motivated by non-aggression
- 8 Reasoning with ones self that aggression is wrong/remembering consequences/recognising implications of aggression/knowing the punishment/rational thinking
- 9 Somatic techniques/lower somatic/physiological arousal
- 10 Relaxation/progressive relaxation techniques/breathing exercises
- 11 Use biofeedback/information on physiological arousal is recognised and dealt with
- 12 Yoga/eq
- 13 Give role (position of) responsibility.
- 14 Punish/withdraw player/remove aggressive cues
- 15 Positively reinforce non-aggressive/negatively reinforce more aggressive
- 16 Emphasise non-aggressive role models/use of peer pressure
- 17 Stress performance rather than outcome goals/set non-aggressive goals

(b) Concentration is an important aspect in mental preparation for sport.

(i) What is meant by concentration in sports performance? [2]

**2 marks from:**

- 1 Control (of concentration)/focus
- 2 Attentional field/style recognised/realise what you need to maintain focus
- 3 Relevant cues need to be picked out from display (for success to occur)/cue utilisation/selective attention.

(ii) Using examples from sport, explain the effect of different attentional styles on performance. [6]

**Levels marked**

<b>Level 3: 5-6 marks</b>	<b>Candidate should identify and explain fully at least 3 attentional styles giving relevant practical examples showing effects</b>
<b>Level 2: 3-4 marks</b>	<b>Candidate identifies and describes (rather than explains) at least two attentional styles giving few practical examples.</b>
<b>Level 1: 1-2 marks</b>	<b>Usually candidate will describe at least one attentional style with little or no relevant practical examples.</b>

Candidates may discuss four styles as Broad Internal, Narrow Internal, Broad External, Narrow External.  
Indicative Content.

- 1 (Nideffer) Broad and narrow dimension.
  - 2 External and internal dimension.
  - 3 (Broad) - attention takes into account a lot of information/peripheral stimuli/ can enable performer to take in peripheral info (open skills).
  - 4 (Narrow) - attention is on very few stimuli/concentrate on small amount of stimuli/information/cues/can enable performer to focus on important elements in the environment/watch the ball/take aim.
  - 5 (External) - Focus is on environmental stimuli/focus directed outwards.
  - 6 (Internal) - Focus on themselves/emotions/thoughts.
- (Effects)
- 7 (External) can enable performer to concentrate on outside factors (other than internal)/can escape inner pain/exhaustion.
  - 8 (Internal) - performer can concentrate on feeling good/zone of optimal functioning/ZOF/peak flow experience/control arousal.
  - 9 Information overload/too much information can cause confusion.
  - 10 The right attention can enable to deal effectively with distractions/will not be put off.
  - 11 Effective attention will improve reactions/reaction time/response time/movement time.
  - 12 Effective attention can prevent negative feelings.
  - 13 Enables positive attributions.
  - 14 Good performers can draw on a range/combination of different styles.
  - 15 Attentional style linked to type of skills/sport

**[Total 21 marks]**

**Mark Scheme 2566  
June 2007**

**SECTION A**

**1 A performer carries out a number of fitness tests. Table 1 gives the results some of these tests.**

**(a) Identify tests A and B. [2]**

**2 marks in total**

1. test A = hand grip dynamometer
2. test B = sit and reach

**(b) (i) Describe the method for the PWC170 test used to measure aerobic capacity. [3]**

**3 marks in total**

**3 marks for 3 of:**

- 1 measure heart rate/using a heart rate monitor
- 2 cycle (ergometer)/exercise bike
- 3 subject pedals at (three) consecutive / progressive workloads
- 4 until heart rate (at that intensity) reaches a steady state
- 5 first intensity sets heart rate at 100-115bpm / second at 115-130bpm / third at 130-145 bpm / (three) progressive heart rates
- 6 a heart rate (v exercise intensity) graph is plotted
- 7 and used to predict the exercise intensity (that would set a heart rate of 170bpm)/max workload

- (ii) Identify and explain four physiological factors related to the heart and skeletal muscle that enable the performer to score so highly on the aerobic capacity test.

[4]

4 marks in total

answers **MUST** be explained

Both heart and muscles must be addressed

3 max for either

Reason	Explanation
<b>HEART</b>	
1 large / strong heart / hypertrophy	able to contract with more force / contractility of myocardium improved/increased stroke volume/more blood/O <sub>2</sub> pumped/greater efficiency
2 low resting heart rate / bradycardia	greater efficiency at pumping blood / oxygen (to the working muscles)/exercise at lower heart rate
3 larger stroke volume / (maximal) cardiac output	more blood / oxygen pumped (per beat into the systemic circulatory system)/increased efficiency
<b>SKELETAL MUSCLE</b>	
4 large myoglobin stores	more efficient transport of oxygen from the blood capillaries to the mitochondria/increase store of O <sub>2</sub> (in muscles)/delays OBLA
5 many mitochondria	allows greater use of aerobic energy/ more ATP/less time spent on anaerobic respiration
6 high enzyme activity	increases rate of glycogen / fat breakdown (making aerobic system more efficient)
7 large stores of glycogen / fats	more fuel / potential energy available (to break down for ATP resynthesis / energy)/produce large amounts of ATP
8 large number of slow twitch / type 1 muscle fibres	physiologically more suited to use oxygen/ aerobic / endurance work/greater fatigue resistance
9 Increased number of capillaries	More blood/O <sub>2</sub> available/increased gaseous exchange

- (c) (i) Describe two types of stretching that could be used to develop flexibility. [4]

**4 marks in total**  
**2 marks max for each type of stretching**  
**only two types to be given credit**

(static stretching) .

- 1 static stretching
- 2 (an active stretch) involves a performer taking joint to a position beyond its point of resistance
- 3 (a passive stretch) uses a partner to move the joint to a position beyond its point of resistance
- 4 position is held for 6+ seconds

(ballistic / dynamic stretching)

- 5 ballistic / dynamic stretching
- 6 momentum is used to take a joint through its full range of movement
- 7 involves swinging / circling / bouncing

(PNF / proprioceptive neuromuscular facilitation)

- 8 PNF / proprioceptive neuromuscular facilitation
- 9 Partner/performer takes joint to a position just beyond its point of resistance
- 10 performs an isometric contraction (for 6-10 seconds)
- 11 muscle is relaxed and stretched again

- (ii) Explain the physiological changes to skeletal muscle and connective tissue after flexibility training [2]

**2 marks in total**

(muscle becomes longer **because**)

1. reflex mechanism of muscle spindle occurs at greater range of movement / muscle spindle becomes used to the length of the stretched muscle / stimulus to the stretch reflex is reduced / stretch reflex is increased
2. Increased elasticity



## Question 2 (Scientific Focus)

## Part One

- (a) (Application of Anatomical and Physiological Knowledge to Improve Performance)

Figure 1 shows an elite female hurdler.

Table 2 is a movement analysis of the hurdler.

Use figure 1 to complete the missing information, A to I in table 2.

**MARKSCHEME**

all areas of the question must be visited to score in the top band of the synoptic marks

**Movement analysis table (submax 5)**

Joint	Joint type	Articulating bones	Action
<b>Right knee (trail leg)</b>	1. A = hinge	2. B = <u>femur, tibia.</u>	3. C = flexion
<b>Left hip (lead leg)</b>	4. D = ball and socket	5. E = (head of) femur and pelvis/ilium	6. F = flexion
<b>Right shoulder (lead arm)</b>	7. G = ball and socket	8. H = (head of) humerus and scapula	9. I = flexion / horizontal flexion

Sit ups are an exercise used to strengthen the iliopsoas muscle.

Explain the types of muscular contraction being used in the iliopsoas muscle during the upward phase and the downward phase of a sit up.

**MARKSCHEME (submax 5) Both upward and downward phases must be visited**

**(upward phase) Sub-sub max 4**

10. concentric / isotonic contraction
11. flexion at the hip
12. iliopsoas is the agonist / prime mover
13. muscle shortening under tension
14. origin moves towards insertion

**(downward phase)**

15. eccentric / (isotonic) contraction (if not given before in point 10)
16. extension at the hip
17. muscle lengthens (under tension)
18. acting as a brake against gravity / controlling downward movement
19. origin moves away from insertion

**A hurdler will have a different muscle fibre type distribution in their hamstrings to that of a marathon runner.**

**Name the three types of muscle fibre found in the body. Explain why the percentage of each muscle fibre type found in the hamstrings of a hurdler is likely to differ from that of a marathon runner.**

**MARKSCHEME (submax 5)**

**Types of muscle fibre                      1 mark if all 3 identified**

20.    slow oxidative / SO / type 1  
        fast oxidative glycolytic / FOG / type IIa  
        fast glycolytic / FG / type IIb

**Hurdler v marathon runner**

21.    hurdler will have a high percentage of fast twitch muscle fibres / marathon runner will have a high percentage of slow twitch fibres (opposites apply)

**(hurdler)**

22.    needs a high speed of contraction (for a fast leg rate)  
 23.    needs to develop considerable force (off the blocks) / (at take off) for each hurdle / explosive strength / power  
 24.    needs high anaerobic capacity / produce energy without oxygen  
 25.    needs large powerful leg muscles  
 26.    needs many fibres per motor unit (to develop more force)  
 27.    needs high phospho-creatine stores

**(marathon runner)**

28.    needs a high resistance to fatigue / to keep going over long distances / endurance / stamina  
 29.    needs high aerobic capacity / efficient use of aerobic energy system)  
 30.    needs high numbers of mitochondria (to optimise production of ATP)  
 31.    needs high numbers of capillaries / allow for efficient gaseous exchange (at the tissue/capillary membrane / in the working muscles)  
 32.    needs high levels of myoglobin / efficient transport of oxygen **within** the muscle  
 33.    needs large glycogen stores (to breakdown for energy supply) / needs large tri-glyceride stores

**TOTAL KNOWLEDGE MARKS = 13**

**SECTION B****Question 2****Part One****(b) (Acquiring and Performing Movement Skills)**

**The classification of motor skills is necessary for effective learning.**

**Identify a motor skill in sport and explain your classification of it using the following continua:**

- **open – closed**
- **discrete – serial – continuous**

**Sub max 5 marks**

**(a suitable motor skill must be identified for marks to be awarded) Max of 3 marks per continuum; accept classification if plausible/justified**

**(Open)**

1. Predominantly perceptual / needs a lot of perception/judgement/interpretation.
2. There is much information to process / the skill is more complex.
3. The environment/others affects the skill performance.
4. There is no clear beginning and end of the skill.
5. The skill is externally paced / the speed / timing of the skill is dictated/controlled by others.

**(Closed)**

6. Predominantly habitual / the same pattern of movements is repeated.
7. There is little information to process / the skill is simple / fewer stimuli/responses.
8. The environment does not affect the skill / others do not affect performance.
9. There is a clear beginning and end to the skill.
10. The skill is internally paced / the performer controls the speed of the skill.

**(Discrete)**

11. The skill has a clear beginning and end.
12. The skill is more habitual.
13. There are specific sub-routines to the skill.
14. The skill can have low organisation.

**(Serial)**

15. The skill is made up of two or more discrete elements/ there are separate skills involved in the whole movement
16. Sub routines are readily separated.
17. The order of elements in sequence
18. The skill has low organisation.
19. Each element has a clear beginning and end.

**(Continuous)**

20. The skill is flowing/fluent / the end of one sub routine becomes the beginning of the next/cyclical
21. Skill cannot easily be split up into sub-routines.
22. There is no clear beginning and end
23. The skill has high organisation.

**Using your classification describe how the skill should be practised for a novice.**

**Explain whether the skill should be practised as a whole or in parts.**

**Sub max 5 marks**

**(Massed / distributed / fixed / varied)**

24. Massed practice for closed skill
25. Distributed practice for open skill
26. Massed if skill is discrete / continuous
27. Distributed if skill is serial
28. Massed for different/discrete elements of the serial skill.
29. Fixed practice for closed skill
30. Fixed practice for discrete skill / serial / continuous.
31. Varied practice to motivate / give more interest.
32. Varied for open skill
33. Varied to build schema / give different experiences (for game situation)

**(Whole / Part)**

34. Whole if continuous / highly organised skills / difficult to separate into sub-routines
35. Whole if discrete
36. Whole to give idea / mental picture / holistic view of skill / more product-orientated
37. Whole to give fluency / kinaesthesia / timing
38. Part for serial skill
39. Part for discrete skills with identifiable sub-routines.
40. Part to give early success / motivate
41. Part so that understanding of the skill is made easier / for more complex skills / more process-orientated

**Identify and explain the three phases of learning motor skills.**

**Sub max 6 marks**

**(2 marks max for each phase)**

**(Cognitive)**

42. Cognitive phase / stage / initial phase / shortest phase / beginners
43. This is when the performer understands what needs to be done / thinks about what needs to be done
44. A mental picture is created / mental practice/rehearsal/imagery/visualisation
45. Some trial and error
46. Very little feedback is acted upon / external feedback acted upon

**(Associative)**

47. Associative stage/phase
48. Practice phase
49. Trial and error / acting on kinaesthesia / reinforcement of (correct) movement
50. Feedback used / error detection / correction
51. Rapid progress.
52. Links the mental model/image with the practice.

**(Autonomous)**

53. Autonomous phase / stage
54. Movements (almost) automatic / habitual / without hesitation / over-learned / grooved / dominant response prevails
55. Movements carried out with little conscious control
56. Attend to peripheral stimuli
57. Motor programme has been formed.
58. Performer must practice / revert to associative phase to remain in this/autonomous phase.

**Maximum of 13 knowledge marks**

## Question 2

## Part two

## (c) (Exercise and Sport Physiology)

Figure 2 represents the energy systems used by high-level performers in their specialist events.

Sketch a similar model to show the energy systems used by a team player, other than a goalkeeper, in a team game of your choice. Using examples from the game situation, explain when and why your performer uses each of the three energy systems.

**MARKSCHEME (submax 8)**

1. Accurate model showing correct proportions of ATP/PC, lactic acid and aerobic energy systems

**NB sport MUST be named**

**\*Aerobic value to be between goalkeeper and marathon runner**

(ATP/PC)

**When**

2. used in moments requiring high intensity / very short duration / up to 10 second (e.g. tackling / shooting / jumping) (or eq.)

**Why**

3. energy can be generated / A TP resynthesised quickly
4. in the absence of oxygen
5. PC is readily available / stored in the muscle cell
6. increase in ADP

(lactic acid)

**When**

7. used for high intensity activity / short duration / 10 seconds - 2 minutes (e.g. sprinting down the wing / fast breaks - attack or defence) (or eq.)

**Why**

8. a fast supply of energy / fast resynthesis of A TP
9. in the absence of oxygen / when oxygen supply is limited
10. glycogen is broken down (anaerobically)
11. decrease in PC

(aerobic)

**When**

12. used for low / moderate intensity / long duration / > 2/3 minutes (e.g. jogging around pitch / lasting the duration of the game / during stoppages for recovery) (or eq.)

**Why**

13. (used when respiratory system and cardiovascular system are) delivering sufficient oxygen to working muscles
14. an efficient source of energy / ATP resynthesis / large amounts of energy / no fatiguing by products
15. oxygen supply is such that fats can also be mobilised (producing an abundance of energy)

**A high anaerobic capacity is important to any team player.**

**Outline the physiological processes that will happen during a 5 minute recovery phase following an intense period of anaerobic exercise.**

**MARKSCHEME (submax 8)**

**Recovery**

16. (processes will occur that) return the body to its pre-exercise state
17. this happens during EPOC / excess post exercise oxygen consumption
18. oxygen used to repay the oxygen debt
19. to resaturate myoglobin with oxygen
20. to maintain elevated heart / respiratory rates
21. to maintain a high body temperature
  
22. during alactacid debt / fast component
23. muscle phosphogen stores / A TP/PC are restored
24. takes 2-3 minutes for full recovery / 50% in 30 seconds
25. using up to 4 litres of oxygen (over and above resting levels)
  
26. during the lactacid debt / slow component
27. lactic acid is removed / oxidised
28. in the mitochondria (via the aerobic system) / cori cycle
29. converted to CO<sub>2</sub> / H<sub>2</sub>O / glycogen / glucose / protein / pyruvic acid / sweat / urine

**TOTAL KNOWLEDGE MARKS = 13**

## APPENDIX

*Suggested links - not intended to be exhaustive*

<b>AS → AS</b>	<b>A2</b>
<b>joint type, articulating bones, joint movement</b> <ul style="list-style-type: none"> <li>• strengthening exercises</li> <li>• muscle function</li> </ul>	<b>Newton's laws of motion</b> <b>levers</b> <b>angular motion</b> <b>ATP resynthesis</b> <b>strength training</b>
<b>types of muscular contraction (isotonic)</b> <ul style="list-style-type: none"> <li>• isometric muscular contraction</li> <li>• effect of warm up</li> <li>• heart rate response</li> </ul>	<b>types of strength training</b> <b>strength training</b> <b>components of fitness</b> <b>fitness testing</b>
<b>muscle fibre types</b> <ul style="list-style-type: none"> <li>• effect of warm up</li> <li>• control of blood supply</li> </ul>	<b>types of training</b> <b>training programmes</b> <b>adaptations to training</b> <b>ergogenic aids</b>
<b>A2 → A2</b>	<b>AS</b>
<b>energy continuum</b> <ul style="list-style-type: none"> <li>• ATP resynthesis</li> <li>• recovery</li> <li>• training programmes</li> </ul>	<b>heart rate / respiratory / vascular response to exercise</b>
<b>Wingate test</b> <ul style="list-style-type: none"> <li>• components of fitness</li> <li>• fitness testing</li> <li>• training programmes</li> </ul>	<b>movement analysis</b> <b>muscle strengthening exercises</b> <b>effect of warm up on skeletal muscle</b> <b>effect of warm up on vascular system</b> <b>heart rate response</b>
<b>Recovery</b> <ul style="list-style-type: none"> <li>• implications of warm up / cool down</li> <li>• adaptations to training</li> </ul>	<b>effect of cool down on vascular system</b> <b>heart rate response to exercise</b> <b>heart / respiratory rate control</b>



## Question 2 part two

## (d) (Biomechanical analysis of Human Movement)

Many performers use spin to control the flight path of a ball. Explain how spin on a ball is generated. Use an air flow diagram to help explain the effect of topspin.

Explain why many sports performers use a 'follow through' as part of their technique.

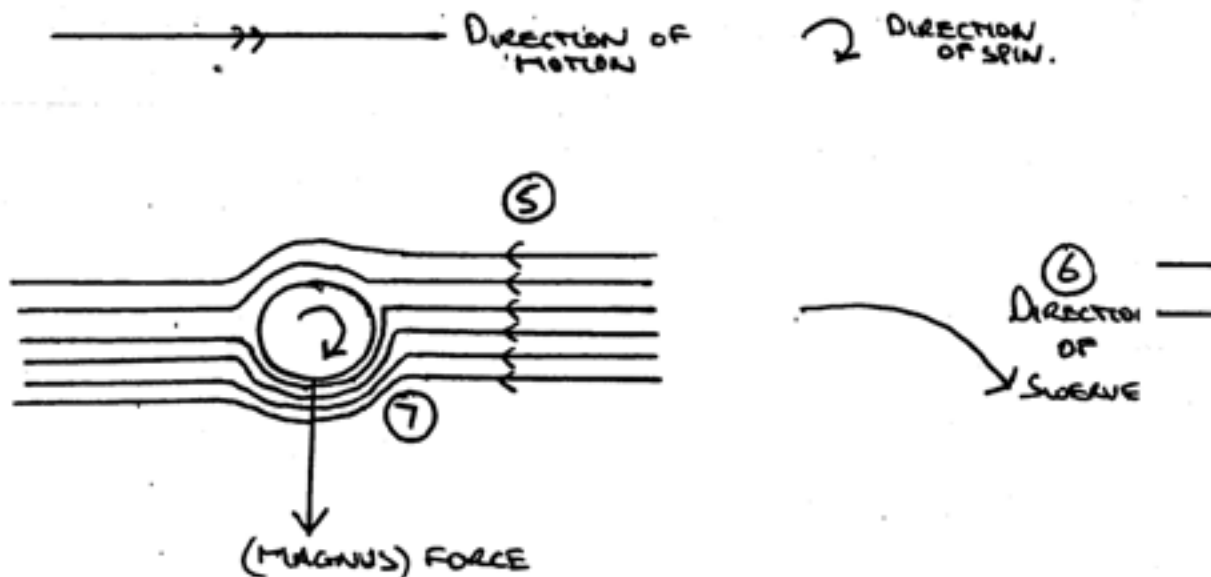
[13]

**(Spin generation) Submax of 3 marks from:**

- 1: Off centre/eccentric force applied to ball.
- 2: Force is applied outside the line of the centre of mass/or eq diagram.
- 3: Moment of force/torque generates spin.
- 4: Gives ball angular motion/momentum.

**(Effect of topspin) Submax of 8 marks from;**

- 5: (Diagram) Airflow line arrows opposite direction of motion.
- 6: (Diagram) Direction of spin in relation to direction of swerve. .
- 7: (Diagram) Narrower airflow lines below the ball.
- 8: (Diagram) Direction of force/magnus at right angles to direction of travel downwards.
- 9: Air travels further underneath the ball.
- 10: Air travels faster underneath the ball.
- 11: Creates low pressure underneath ball/or on diagram.
- 12: Causes force to go from high to low pressure.
- 13: Called the Magnus force.
- 14: Shortens flightpath (makes ball dip in flight or diagram = P)
- 15: Non parabolic/asymmetrical flight path.



**(Follow through) Submax of 4 marks from;**

- 16: Force is applied to projectile for longer.
- 17: Impulse is increased.
- 18: Outgoing momentum is increased.
- 19: Outgoing velocity is increased / goes faster
- 20: Distance travelled by the projectile is increased.
- 21: Control of projectile is enhanced.

**TOTAL 13 MARKS**

**Synoptic Links**

- Spin generation** - Analogue of Newton 2
- Effect of topspin** - Comparison with back and sidespin - Effect of topspin on bounce of ball
- Follow through** - Newton 2  
- Newton 3

**Question 2 part two****(e) (Psychology of Sport Performance)**

**Motivation in sport can be affected by achievement motivation and attribution for performance outcomes. Motives to achieve are more productive in sports performance than motives to avoid failure.**

**Describe the characteristics of performers who need to achieve in sport.**

**Sub max 6 marks**

1. Approach behaviour / tendency to approach success
2. (Nach) (very) competitive.
3. Likes a challenge.
4. Likes / seeks feedback.
5. Takes risks / high confidence
6. Not afraid to fail/views failure as a route to success.
7. Attributes success internally
8. Attributes success to stable factors
9. Attributes failures to unstable factors
10. Attribute failure to controllable factors

**Explain what is meant by learned helplessness in sport.**

**Sub max 4 marks**

11. Feeling / affective response / emotion
12. (linked to) hopelessness / being useless/ having low ability/failure inevitable
13. Has low confidence / low self efficacy
14. (due to) perceived / actual failure / poor past experiences
15. Failure reinforced by others.
16. Avoidance behaviours / hides from responsibility / seeks to escape / lack of persistence / gives up easily / not try their best
17. Attribute failure to internal factors
18. Attribute failure to stable factors
19. Attribute failure to uncontrollable factors

**Explain how you would help a sports performer to reattribute to avoid learned helplessness and to promote mastery orientation.**

**Sub max 6 marks**

20. Attribute failure to controllable / internal factors/ empower/ convince that they can control part of future performances. (examples may include putting more effort into the activity).
21. Attribute failure to unstable factors/ changeable factors / aspects that are not permanent or enduring (examples may include effort/luck/tactics / developing skills etc)
22. Use role models / significant others/leaders/coach/other players.
23. Use vicarious experiences / to see those of similar ability succeed in the task.
24. Positive reinforcement / encouragement/ verbal persuasion/positive feedback
25. Raise self-confidence/efficacy/self esteem

26. Enable success to be experienced / give success / enable positive outcomes / achievable goals / realistic goals
27. Control arousal / calm them.
28. Use mental practice / imagery of successful movement.
29. Use goal setting that is specific.
30. Measured target/goal
31. Goals must be challenging.

**Total of 13 knowledge marks**

**LINKS**

<b>A/S</b>		<b>A2</b>
Classification>phases of learning>motivation > motor programmes	>	Achievement motivation> Personality Social facilitation
Presentation of skills> motivation> transfer > Motor programmes> schema> phases of learning	>	Achievement motivation > Personality> Attitudes Social facilitation Self efficacy / confidence
Phases of learning > motivation> learning theories > motor programmes> schema	>	Goal setting> confidence > leadership

**Question 3 (Socio-cultural focus)****Part One****(a) (Contemporary Studies in Physical Education)**

**Explain how sportsmanship (fair play) and gamesmanship (unfair play) can each affect a sporting situation.**

**Sub max 6 marks**

<p>effects of sportsmanship sub sub max 3</p>	<ol style="list-style-type: none"> <li>1. treating opponents with respect / support of officials' decisions</li> <li>2. helps make event successful</li> <li>3. helps event flow / fewer breaks in play</li> <li>4. admired by spectators</li> <li>5. increases goodwill</li> <li>6. strengthens sport as an institution/raises status of sport/reinforces positive behaviour /friendlier/respectful atmosphere</li> <li>7. produces positive role models</li> </ol>
<p>effects of gamesmanship sub sub max 3</p>	<ol style="list-style-type: none"> <li>8. pushing rules to the limit without breaking them/bending rules to get advantage/unfair advantage/ undermines officials</li> <li>9. causes bad feeling/retaliation / disrespectful</li> <li>10. disrupts event/breaks continuity of event</li> <li>11. leaves most spectators angry/feeling dissatisfied</li> <li>12. causes friction among spectators</li> <li>13. undermines sport as an institution/lowers status of sport/ gives bad example/affects sport negatively</li> <li>14. produces negative role models</li> </ol>

**Discuss the issue of drugs in sport. Your answer should include - reasons why some performers take performance enhancing drugs, - reasons why they should not do so, and - possible solutions to the problem.**

**Sub max 9 marks**

<p>reasons why some performers take performance enhancing drugs <b>sub sub max 3</b></p>	<p>15. pressure from coaches/pressure from media/pressure from peers/pressure to perform/others</p> <p>16. the belief that others are taking drugs</p> <p>17. win at all costs ethic/fame/glory</p> <p>18. the promise of financial rewards</p> <p>19. fear of losing / failure</p>
<p>reasons why they should not do so <b>sub sub max 3</b></p>	<p>20. illegality/some drugs against law/some against rules of sport</p> <p>21. bad role modelling</p> <p>22. harmful/dangerous/health reasons/addictive</p> <p>23. cheating/unfair advantage</p> <p>24. gives sport bad name/bad image to sport /gives team mates bad name</p>
<p>possible solutions to the problem. <b>sub sub max 3</b></p>	<p>25. more frequent testing/more effective testing</p> <p>26. encourage top performers to stress 'no drugs' / positive role models</p> <p>27. increased funding (for better testing)</p> <p>28. stricter bans/life bans/stronger penalties</p> <p>29. educate coaches and athletes about dangers</p>

**Total knowledge marks 13**

**Question 3 Part Two****(b) (Historical Studies in Physical Education)****Outline features of Pre-Industrial cricket.****Sub max 6**

1. (rural)	rural game/village game
2. (kit)	no special kit
3. (equipment)	simple equipment/two stumps/club shaped bat
4. (space)	no set boundaries/played in fields /played on meadows
5. (rules)	early rules/articles of agreement/rules locally adapted (underarm bowling)
6. (scoring)	scoring by 'notching' on wood
7. (bat and ball)	game developed at Bat and Ball Inn /Hambleton/Hampshire
8. (fixtures)	early county games /matches often arranged on special feast days /and holy days/ occasional
9 (wagering)	wagering
10.(MCC)	Marylebone cricket club (MCC) founded in 1788/MCC employed professionals as coaches and players/MCC became 'governing body' of cricket
11.(class)	upper and lower class played together/ upper class employed lower class/lower class needed to make up numbers/lower class needed for their skill

With reference to Fig 1 and to your own knowledge identify different character building values and explain how each of them could be developed through the game of cricket.

Need value and how it could be developed to gain mark

Sub max 6

Value	How developed through cricket
12. teamwork	everyone needed/working together/supporting each other
13. leadership	captain
14. loyalty	to team/to house/to school
15. courage /manliness	in face of strong opposition/to cope with difficult conditions/when injured
16. endeavour / determination /perseverance / commitment	training hard/not giving up when score or conditions difficult/coming back from injury/working to get into a team/always turning up to practice/having private coaching
17. discipline	keeping cool under pressure
18. honesty / integrity / sportsmanship / fair play	admitting/'walking' when out/admitting you have not made a catch/not cheating/ keeping strictly to rules/accepting umpire's decisions/respecting opposition
19. trust	in team mates/in captain's decisions/in selection
	Other suitable examples of how each value is developed should be accepted



**Explain how social changes associated with urbanisation and industrialisation influenced the development of rationalised cricket.**

**Sub max 6**

**Social changes**

20. influence of new middle class increased respectability / changed attitudes
21. (business & administrative skills of ex-public schoolboys lead to) development of NGBs / administrative ability of educated classes influenced rules/structure.
22. literacy / media increased popularity
23. more free time/Saturday 1/2 day increased regularity / spectatorism /popularity
24. improved transport & communications / the railways influenced spread/regionalisation.
25. the railways allowed touring teams to become famous (William Clarke XI)
26. spread of public school ethos increased sportsmanship / skilfulness
27. increased law and order led to reduction of gambling
28. class-based nature of Britain resulted in amateur / professional divide in cricket / unpaid gentlemen amateurs and paid working class professionals.

**(Total knowledge marks = 13)**

**APPENDIX - Examples of possible links****AS to AS****sportsmanship & gamesmanship**

- values of PE in schools
- amateurism/professionalism ·
- gamesmanship leading to violence by spectators and players

**drugs**

- UKSI - medical research ·
- scUk - to educate coaches ·
- UK Sport - anti doping unit/drug testing ·
- NGBs - education/prevention role/s ·
- roles of coach (eg disciplinarian/motivator) ·
- problems associated with sport as big business/increased 'Americanisation' of sport/win at all costs ethic ·
- roles of media/pressure from media ·
- other types of deviance/cheating/corruption ·
- sponsorship - pressure from sponsors to win

**A2 to A2****pre-industrial cricket .**

- influence of class/feudal society/courtly v popular ·
- comparisons with other pre-industrial activities e.g. violence of mob football / exclusivity of real tennis ·
- cultural factors influencing features of cricket e.g.
- time/space/transport/ calendar/holidays ·
- comparison with rationalised cricket ·
- amateurism and professionalism

**character building values through cricket**

- also available through other team games e.g. football/rugby ·
- also through individual activities e.g. cross country running/steeplechase ·
- Dr Arnold and social control ·
- comparisons with stage one of development/individuality ·
- different to ethos of State Elementary schools ·
- different to facilities/money/staffing in State Elementary schools

**AS to A2 .**

- Sportsmanship/fair play/values of Physical Education today (AS) and values of athleticism (A2) ·
- Roles of coach today (AS) & roles and status of cricket professionals in public schools (A2) ·
- Role modelling and deviance (AS) role modelling and hero worship (A2)
- Contemporary sport as big business (AS) public school sport for the 'love of the game' (A2) .
- Amateurism and professionalism now (AS) v then (A2)

## Question 3 Part Two

## (c) (Comparative Studies in Physical Education)

Explain why high-level sport has status in either Australia or France. 5 marks max

	Australia	France
1. patriotism	Sport used to unite the young country / benchmark for progress / global recognition.	Sport used to promote nationalism / generates love of the country / use of sport to raise national morale
2. tradition. / history.	Sports obsessed country / adopted sports in colonial period / history of high-level performance / national recognition of sports heroes.	Success in major sports / Soccer world cup winners / historical promotion of sport / Vichy government / de Courbertin and Olympianism
3. political.	Central political agenda/funding / ASC is government arm.	Central funding for sport / involvement of government in sport at all levels
4. centres of excellence.	Institutes of Sport	INSEP/ specialist centres with e.g. National School of Sailing / Altitude Centre (eg.Font Romeul) / Regional Sporting Centre (eg.CREPS)
5. mass participation.	Great government commitment / More Active Australia.	Great government commitment / Sport Pour Tous
6. equality.	Bringing together cosmopolitan society / supports multi -culturalism / addresses gender Issues / strong commitment to disabilities	Bringing together cosmopolitan society/ use of former Empire to supplement international teams / strong commitment to gender issues
7. school	PE & High status to PE & sport/ many initiatives sport. e.g. SEPEP/PASE/ Sports Linkage	Increased status to PE/high status for sport/ many initiatives e.g. Primary Sports Schools/UNSS/better teacher training
8. economy.	Sport used to boost economy (e.g. Olympics/ World Cup) / affluent nation spend on sport	Sport used to boost economy (e.g. Tour de France / World Cup) promotion of golf/affluent nation spend on sport
9. climate/ geography.	Favourable climate promotes sport / outdoor life /beach culture / outdoor recreation/ space	Favourable climate promotes sport/ natural features / space /mountains
10. culture.	Integral part of life / country working together / egalitarianism / sport and the young nation	Part of high culture / holistic person / sport as a celebration of culture

Compare the professional sports scene in the UK with that in the USA

10 marks max

	U.K	U.S.A
Status		
11. status for players	Increased status / pro linked with excellence/high living / high wages	Pro player always had high status/ pro sport linked with Dream
12. status for pro sport	Move toward pro sport/ amateur ethos over ridden/ vehicle for wealth.	Pro sport has been part of culture/life
13 commercialism	Limited potential in contrast / only soccer with high commercial potential	High potential/big 4 sports generate money.
14 global	Games tend to be global	Games tend to be based in USA
15 business organisation	Clubs tend to operate individually / accountable to governing bodies/ teams tend not to relocate	Cartel business operation/franchising / governing body part of the business / teams can relocate
16. entertainment industry.	Increasing emphasis on sport as entertainment / potential of corporate entertainment /consumer market	Long tradition of sport as entertainment/ pro-sport designed to be part of entertainment industry.
17. entertainment other than game	Limited entertainment away from the game/ emphasis on game only.	Additional entertainment important / presence of cheerleaders / side shows

Personal opportunities		
18 racial equality	Stacking / centrality evident in rugby / disappearing in soccer	Stacking / centrality still evident
19 ethnic dominance amongst players	Pro sport still dominated by main stream culture	Emergence of black domination / black domination in basketball / 'White Flight'
20 ethnic dominance of coaches owners admin	White / main stream	White / mainstream / WASP
21 gender	Pro-sport male dominated	Pro-sport male dominated
22 gender (female)	Increased opportunities for females / tennis / golf / netball / athletics give opportunity	Increased opportunities for females/ tennis / golf / basketball / athletics give opportunity
23 gender (female)	Attempts to establish pro soccer for females	Pro soccer established for females

Policies to achieve sporting excellence.		
24 centres of excellence	UKSI/ network institutions	Colleges
25 professional	Pro clubs tend to have academies / select players players from club academy /club youth policy	Pro-draft / baseball clubs tend to develop own talent
26 excellence focus	Club orientated	Centred in education

Behaviour		
27. behaviour of crowds	Can be volatile/ aggressive /emotive /chanting/some racial abuse	Crowd violence is rare
28. behaviour of players	Aggression / gamesmanship / cheating is evident in some pro sports / sportsmanship in others.	Aggression /gamesmanship /cheating is evident in Big 4 pro sports
29. composition of crowd	Majority young male	Family orientation
30. spectator code	Not publicised	Well publicised
31. alcohol	Available at games/feature	Available/less of a feature
32. travel	Away fans travel/cause of disruption	Away fans tend not to travel/no disruption

Other points of comparison between UK and USA professional sports scene		
33. sponsorship	Tends to be displayed on team shirt/jersey	Tends not to be displayed on team kit
34. commercial breaks	Commercial breaks when natural break in game / commercial break when batter out in cricket as e.g.	The game incorporates time for a commercial break / time out allows commercial break
35. nature of games	limited violence	more violence
36. feature of games	Uninterrupted action	Short bursts/ intensive action
37. (scoring)	High scoring may not occur	High scoring essential
38. result outcome	Draw is accepted / part of the result	Not accepted
39. (protection)	Limited protection/ padding/helmets / protection not used to give image / protection not used to promote sensationalism	Often high profile protection / used to give image/ protection used to promote sensationalism
39. (development)	Traditional/long development/changes recently brought about by media pressure	product of isolation/games invented/ games adapted / games to suit culture

**Total 13 marks**

Links with other countries.

Australia.

- (status) High status for sport
- (culture) Cultural significance
- (excellence) Institutes
- (excellence) Sports Progression pathways
- (equality) Disproportional representation of ethnics in some sports
- (commercial) Evidence of innovation e.g. World Series cricket
- (commercial) First country to display sponsors on kit
- (commercial) Arrangements in Aussie rules for commercial breaks
- (media) High media profile
- (behaviour) Players well disciplined
- (behaviour) Crowds well disciplined

France

- (status) High status for sport
- (culture) Culturally significant / patriotism / naturalism / militarism / intellectualism
- (excellence) INSEP / Regional centres / CREPS
- (equality) Strong evidence of ethnic inclusion in international teams.
- (political) Government soccer salary cap / soccer players driven away by salary cap.
- (historical) Amateur sport used for nationalism
- (historical) Boundaries between amateur and professionalism were unclear
- (historical) France pursued rugby
- (rejected cricket) the game of the British Empire
- (commercial) Sponsorship brings money to professional sports
- (commercial) Tour de France sponsored teams not international teams
- (media) Strong media presence
- (behaviour) Players tend to be volatile / Gaelic temperament

## Banded criteria for synoptic assessment

16 - 19	<p>A comprehensive response:</p> <ul style="list-style-type: none"> <li>• <b>Comprehensive knowledge has been consistently and clearly linked to practical performance.</b></li> <li>• <b>Relevant links and connections between and within study areas have been made successfully.</b></li> <li>• <b>Responses at the top of this level will demonstrate sound analytical and evaluative skills.</b></li> <li>• There is evidence of well-argued, independent opinion and judgements supported by sound examples.</li> <li>• Technical and specialist vocabulary is used accurately.</li> <li>• The Quality of Written Communication is generally fluent with few errors.</li> </ul>
11 - 15	<p>A competent answer:</p> <ul style="list-style-type: none"> <li>• Substantial knowledge has been linked to practical performance and the majority of examples will be well considered.</li> <li>• Relevant links between and within subject areas have been made with some success.</li> <li>• Evidence of sound analysis is apparent.</li> <li>• Independent opinions and judgements will be present but towards the bottom of this level, not always supported by sound examples.</li> <li>• Technical and specialist vocabulary is used with some accuracy.</li> <li>• The Quality of Written Communication is generally fluent with few errors.</li> </ul>
6 - 10	<p>A straightforward answer:</p> <ul style="list-style-type: none"> <li>• <b>There will be evidence that some knowledge has been linked to practical performance. Connections are made between and within study areas but at the bottom of this level, links will be tenuous.</b></li> <li>• Analysis will be limited and restricted to the obvious.</li> <li>• Opinion and judgement will be unsupported.</li> <li>• Technical and specialist vocabulary is used with limited success.</li> <li>• The Quality of Written Communication lacks fluency and there will be errors.</li> </ul>
0 - 5	<p>A limited answer:</p> <ul style="list-style-type: none"> <li>• There will be limited knowledge with few links to practical performance.</li> <li>• Connections within and between study areas rarely made.</li> <li>• Opinion and judgement almost entirely absent.</li> <li>• <b>Little or no attempt to use technical and specialist vocabulary at the bottom of this level.</b></li> <li>• <b>Errors in Quality of Written Communication will be intrusive.</b></li> </ul>

**Advanced GCE (Subject) (Aggregation Code(s))  
June 2007 Assessment Series**

Unit Threshold Marks

<b>Unit</b>		<b>Maximum Mark</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>u</b>
<b>2562</b>	Raw	60	38	33	29	25	21	0
	UMS	120	96	84	72	60	48	0
<b>2563</b>	Raw	45	37	34	31	28	25	0
	UMS	90	72	63	54	45	36	0
<b>2564</b>	Raw	90	69	62	55	48	41	0
	UMS	90	72	63	54	45	36	0
<b>2565</b>	Raw	45	33	30	27	24	21	0
	UMS	90	72	63	54	45	36	0
<b>2566</b>	Raw	60	47	42	38	34	30	0
	UMS	120	96	84	72	60	48	0
<b>2567</b>	Raw	90	70	63	57	51	45	0
	UMS	90	72	63	54	45	36	0

Specification Aggregation Results

Overall threshold marks in UMS (i.e. after conversion of raw marks to uniform marks)

	<b>Maximum Mark</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>U</b>
<b>3875</b>	300	240	210	180	150	120	0
<b>7875</b>	600	480	420	360	300	240	0

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

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>U</b>	<b>Total Number of Candidates</b>
<b>3875</b>	12.36	28.13	49.07	70.23	87.64	100	14561
<b>7875</b>	13.71	33.81	58.10	81.48	96.46	100	10771

25332 candidates aggregated this series

For a description of how UMS marks are calculated see;  
[http://www.ocr.org.uk/exam\\_system/understand\\_ums.html](http://www.ocr.org.uk/exam_system/understand_ums.html)

Statistics are correct at the time of publication





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