

GCE

Physical Education

Advanced GCE

Unit G453: Principles and concepts across different areas of Physical Education

Mark Scheme for June 2013

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2013

Annotations

Annotation	Meaning
/	= Correct response
NAQ	= Not answering the question
BOD	= Benefit of the doubt
R	= Repeat
VG	= Too Vague
DEV	= Development (levels scheme)
IRRL	= Significant amount of material which does not answer the question
SEEN	= Noted but no credit given
L1	= Level 1 (levels scheme)
L2	= Level 2 (levels scheme)
L3	= Level 3 (levels scheme)
L4	= Level 4 (levels scheme)
Р	= Practical example (levels scheme)
Е	= Evaluative point (levels scheme)
I	= Independent opinion (levels scheme)

Subject-specific Marking Instructions

Marking responses 'a-c'; points marked questions

An element of professional judgement is required in the marking of G453. Correct answers should always be rewarded irrespective of whether or not they appear on the mark scheme. If you are in doubt about the validity of any answer then consult your Team Leader (Supervisor) by phone or e-mail.

Marking response 'd'; levels of response marked question

It is quite possible for an excellent and valid answer to contain knowledge and arguments which do not appear in the indicative content on the mark scheme. Each answer must be assessed on its own merits according to the generic descriptors and discriminators.

The levels of response descriptors are cumulative, ie a description at one level builds on or improves the descriptions at lower levels. Not all qualities listed in a level must be demonstrated in an answer for it to fall in that level.

Candidates will take different approaches to achieve within the same level. Some will adopt a less focused approach but demonstrate a wide range of knowledge others may adopt a more focused approach using a narrower range of well-developed knowledge.

Approach to marking levels of response questions:

- read the candidate response in full;
- working from the top down and using a *best-fit* approach, refer to the generic descriptors and discriminators to determine the level;
- re-read the answer, highlighting credit worthy aspects of the response in relation to knowledge, understanding, development, examples, etc;
- confirm or revise initial decision re level;
- determine the mark within the level as per the guidance in 10 (above), with reference to the discriminators, and, again, using a *best-fit* approach.

Section A Historical Studies (Option A1)

Q	uestion		Answer	Marks	Guidance	
1	(a)	5 marks for 5 of: Socio-cultural factors that influenced t (sub max 4)	Socio-cultural factors that influenced the characteristics of mob football			
		Socio-cultural factors	Mob football characteristics]	characteristic to score each mark.	
		limited transport and/or communications	Local/localised rules			
		2. illiteracy/no NGBs/uneducated	simple unwritten rules or limited organisation/un-codified			
		reflection of life and time/ harsh society/lack of policing	violent or dangerous			
		4. seasonal time/free time on Holy Days or annual holiday or lack of spare/free time	Occasional or festival			
		5. agricultural/before industrial revolution/before migration to towns/population centred on village or county town life	Rural or natural			
		Lack of facilities/equipment or lack of technology or poverty	Simple or inexpensive to play			
		7. Rags to riches/increase income	wagering			
		8. two class society/feudal system	played by lower class (males)			
			es to impact Sub max 1 for one of:		Sub max 1 for how one of these	
		9. transport eg not having a car s			factors continues to impact on	
		10. education eg encouraged to pu include playing football	ursue a healthy active lifestyle which might		participation in football today.	
		11. reflection of society eg impact giving time due to unemployme	of recession limiting finance but possibly ent		Accept any suitable examples.	
		12. time eg working long hours and			Accept a positive impact as a result	
		13. money/income eg unemployed play in it simplest form without	and unable to afford kit or join club / can expense.		e.g. increased use of transport enables more fixtures.	
		14. Technology – e.g. improved ed	uipment to better performance		Chables more fixtures.	

Question			Answer	Marks	Guidance
(b)	5 mai	rks for 5 of:		5	
	Desci	ription of public so	chools – stage two (sub max 4)		
	1.	(transition)	(Transition from) popular recreation to rational recreation		Sub max 4 for description of stage
	2.	(expansion)	School expansion or curriculum expansion/sport and an academic curriculum		two
	3.	(overall reform)	Time of reform or new 'moral code' / values established or example of values/character building increasingly civilised/more orderly/better behaviour/less		
		(reflection)	barbaric (punishments) Reflection of changes in society		
	4. 5.	(Muscular	Muscular Christianity or godliness and manliness or		
	5.	Christianity)	chapel as 'centre' of school or sporting success glorify God		
	6.	(responsibility)	Responsibility given to sixth form or sixth form became link between masters and younger boys or sixth form as 'police force'/older boys as role models/6 th form organised games		
	7.	(relationships)	Improved relationships or more trust / respect or less bullying / brutality / teachers have pastoral role / more involved		
	8.	(house	House system developed / expanded or		
		system)	Inter-house games		
	9.	(social control)	(Games used to establish) social control or more discipline or kept them busy/occupied		
	10.	(regularity)	Games or sports more regular		
	11.	(technical dev/ status)	Games or sports more organised / structured / sophisticated or specialist / technical equipment / facilities/ or (some) purpose built facilities		
	12.	(status)	Status of games grew or games became central to public school life		

Question		Answer	Marks	Guidance
	(one reason for slo	wer development of athleticism in girls' public schools)		Sub max 1 for slower development of athleticism in girls' public schools
	13. (social inferiority)	notion of keeping women 'in their place' or the traditional role of women in society or (perceived) lower status of women in society or belief that girls did not need / deserve the same opportunities as boys		
	14. (physical inferiority)	(perceived) physical inferiority of women or belief that physical activity was harmful / dangerous for women/(perception) of danger to pregnancy		
	15. (unladylike			
	16. (alternative			
	17. (role mode reformers)			

Question			Answer	Marks	Guidance
(c)			e 1902 Model Course was quickly replaced because: arks for four from:	5	
	1.	(military)	of its militaristic nature or it focused on preparation for war which was considered inappropriate or it was imposed by War Office or it was introduced due to Boer war		Sub max 4 for why the 1902 Model Course was quickly replaced.
	2.	(guns)	proficiency with guns no longer necessary / desirable or dummy weapons drill outdated or new era needed / new approach or more enlightened times		Do not accept a list without explanation
	3.	(NCOs)	'taught' by army (NCOs) who didn't understand or cater for children		
	4.	(command like soldiers)	its command style was no longer (thought to be) appropriate or children were treated like soldiers		
	5.	(centralised)	of its centralised approach/ everyone did same thing at same time or it had no individuality / creativity / group work		
	6.	(differences)	it didn't cater for different ages / genders or a more child centred approach was needed		
	7.	(backward step)	(it was a backward step because it) lowered the status of the subject or the pre-1902 approach was (comparatively) innovative or progressives / supporters of Swedish gymnastics didn't approve of it or a move back to Swedish system wanted		
	8.	(health/ Newman)	a more therapeutic approach was needed or Model Course did not consider health or there was concern over children's' health or Dr George Newman became involved		
	9.	(boring)	it was too narrow / boring / dull / repetitive or a more varied or broader approach was needed or 'lessons' were the same each time or athletic / gymnastic / games skills considered valuable		
	1 1	(new equipment)	more / new / varied equipment became available or bean bags / ropes / balls / hoops (or equiv)		
		(Education)	power given back to Education Dept (rather than the War Office)		

*	Answer	Marks	Guidance
Model Course 12. Objecti develop F G G T 13. The 19 F T	Answer of the 1933 Syllabus that differed from the objectives of the 1902 ives of the 1933 Syllabus that differed from 1902 included the pment of: Physical fitness Skills Health/therapeutic aims Good) physique Good) posture The whole child/mind and body/holistic/create thinkers Treating children as children or not treating children as 'little soldiers'. 33 Syllabus did not have the following objectives: Titness for war To keep lower class 'in their place'/to show lower class their place in ociety.	Marks	Sub max 1 for stating one objective of the 1933 Syllabus that differed from the 1902 Model Course. Give one mark for one objective identified from the list provided Do not accept physical activities on its own, problem solving, enjoyment

1 (d)* Levels of Response: Analyse the impact of social class and ge	ender on the development of tennis from its earliest days to today
Level 4 (18–20 marks)	At Level 4 responses are likely to include:
A comprehensive answer:	detailed knowledge and excellent understanding of the topic
detailed knowledge & excellent understanding	very well structured with the appropriate balance
detailed analysis and excellent critical evaluation	successful analysis of the impact of social class and gender on
well-argued, independent opinion and judgements which are well	the development of tennis
supported by relevant practical examples	class and gender in all three eras included – pre-industrial
very accurate use of technical and specialist vocabulary	(popular recreation) post industrial (rational recreation) and today.
high standard of written communication throughout.	
Level 3 (13–17 marks)	At Level 3 responses are likely to include:
A competent answer:	good knowledge and clear understanding of the topic
good knowledge and clear understanding	good structure and balance
good analysis and critical evaluation	competent analysis of the impact of social class and gender on
 independent opinions and judgements will be present but may not 	the development of tennis
always be supported by relevant practical examples	class and gender in all three eras probably included – pre-
generally accurate use of technical and specialist vocabulary	industrial (popular recreation) post industrial times (rational
written communication is generally fluent with few errors.	recreation) and today.
Level 2 (8–12 marks)	At Level 2 responses are likely to include:
A limited answer:	limited knowledge and understanding of the topic
 limited knowledge and understanding 	an attempt at structure and appropriate balance
 some evidence of analysis and critical evaluation 	an attempt at analysis of the impact of social class and gender on
 opinion and judgement given but often unsupported by relevant 	the development of tennis
practical examples	 class and/or gender in all three eras probably not included – pre-
technical and specialist vocabulary used with limited success	industrial (popular recreation) post industrial (rational recreation)
 written communication lacks fluency and contains errors. 	and today.
Level 1 (0–7 marks)	At Level 1 responses <u>are likely</u> to include:
A basic answer:	basic knowledge and understanding of the topic
basic knowledge and little understanding	basic or no structure/answer likely to lack appropriate balance
little relevant analysis or critical evaluation	little or no analysis of the impact of social class and/or gender on
 little or no attempt to give opinion or judgement 	the development of tennis
 little or no attempt to use technical and specialist vocabulary 	class and/or gender in all three eras not included – pre-industrial
errors in written communication will be intrusive.	(popular recreation) post industrial (rational recreation) and today.
	Some misunderstandings / inaccuracies

Question		Answer	Marks	Guidance
(d)*	earliest days to today game of real tennis a	of social class and gender on the development of tennis from its y. Your answer should include descriptions of the pre-industrial and the post-industrial game of lawn tennis	20	
	Real Tennis – Ref Cl	ass:		
	1. (Upper class)	upper class/gentry/courtly		
		Henry VIII had court eg at Hampton Court.		
	2. (lower class)	Lower class copied the game/simple or informal versions copied by lower class using any suitable wall or location eg church wall.		
	3. (wagering)	Wagering involved to show status or to show off		
	4. (facilities)	Purpose built or sophisticated facilities Expensive court different sizes and/or shapes to courts/same basic layout eg penthouse/dedans or other aspect of court (usually) played on an enclosed court with walls on all sides unusual – most popular recreations used simple or cheap or natural facilities eg swimming.		
	5. (when)	Played regularly or often		

Question		Answer	Marks	Guidance
	Real Tennis – Ref Ge	ender:		
	6. (men only)	Men only/exclusively men/no opportunities for female participation		
	Real Tennis – Other:			
	7. (skill)	A skilful game/difficult game unusual/most popular recreations needed force not skill upper class wanted a complex or difficult game to show exclusivity or to show their breeding.		
	8. (rural or urban)	rural or urban in (private) homes of gentry/on their estates.		
	9. (not local)	not local Upper class had transport or could travel to play.		
	10. (rules)	Had (complex) rules/it was (comparatively) well organised or structured unusual as most popular recreations had simple unwritten rules eg mob football due to education of participants/they were literate		
	11. (equipment)	 eg (complexities of) a 'chase'. Specialist or expensive equipment They could afford it eg racquets. 		
	12. (France)	Originated in France • Called jeu de paume.		
	13. (non violent)	Non-violent		
	Lawn tennis – Ref C	lass:		
	14. (middle class)	Middle class game/middle class invention		

Question		Answer	Marks	Guidance
		 because middle class were excluded from or could not play real tennis became a status symbol/fashionable. 		
	15. (MC gardens)	It suited (upper) middle class (suburban) gardens • privacy (from lower class)/walls or hedges ensured privacy		
	16. (working class)	Working class excluded They (eventually) played in public parks.		
	17. (Wingfield)	Invented and or patented by (major Walter Clompton) Wingfield • in 1874.		
	18. (clubs)	(private) tennis clubs establishedby middle class (whose gardens unsuitable for own court).		
	Lawn Tennis - Ref G			
	19. (emancipation)	Vehicle for emancipation of womenWomen overcoming stereotype/suppression		
	20. (social)	 Social occasion or experience to mix with opposite sex/to meet a (suitable) 'partner an urban alternative to the social life of 'country set' eg 'hunt' balls. not violent/no exertion wear dresses 		
	21. (public schools)	 Rejected by public schools not manly enough/their sisters played it not a good vehicle for the development of character used a lot of space not a team game/did not require teamwork. 		
	22. (female role models)	Female role models eg Lotti Dodd she first won (ladies singles title) in 1887 (aged 15) won title five times an outstanding all-round sportswoman.		
	Lawn Tennis - Other]	
	23. (at first)	Originally called Sphairistike • played on hourglass shaped court		
		name and court shape soon replaced.		

Question		Answer	Marks	Guidance
		Parks		
	24. (Wimbledon)	Lawn Tennis (first introduced) to Wimbledon (joining croquet) • 1877.		
	25. (esteem)	confidence to play or acceptance of game as attractive or suitable was greater for middle/upper than for lower class		
	Today			
	26. (20th century)	tennis mainly kept its reputation as a 'posh' game or as a game for the middle class		
	27. (21st century)	LTA or tennis has been trying to change its reputation as middle class game		
	28. (opportunity)	opportunity (arguably) greater for middle and upper class than for lower class		
	29. (provision)	Provision (arguably) greater for middle and upper class than for lower class		
	30. (class)	initiatives to make game more inclusive eg LTA initiatives to increase participation in inner cities • free or subsidised courts in parks in some areas. • Pop- up tennis courts		
	31. (clubs)	PESSCL/PESSYP Work of SSCOs to help increase participation school club links to help flow of potential players to join clubs.		
	32. (Gender)	Both males and females participate		
	But			
	33. (schools)	Can be a difficult game to deliver well in many schools lack of space/limited number of courts high cost of court upkeep courts converted to car parks in some schools. poor weather		
	34. (continued exclusivity)	Continued evidence of exclusivity county teams disproportionately represented by independent school players		

Qu	uestion			Answer	Marks	Guidance
				(very) expensive (for/if youngsters) 'on the circuit'		
		35.	(Participation in	 need parents with time and or resources. Recent government announcement on tennis to encourage more to 		
			decline -recent	play tennis		
			announcement)	 tennis participation down by 13% since 2008. 		
				Those who are from better off backgrounds are twice as likely		
				to play the game.		

Section A Comparative Studies

		Answer	Marks	Guidance
(a)	5 marks for 5 of: Initiativ (sub max 4)	es to promote PE and sport in Australian schools	5	
	Name	Description		
	1. SEPEP	Equivalent to UK NC for PE or framework for		
	(Sport Education and PE Project)	teaching PE or method that can be adapted or 100 minutes per week of both PE and sport		Sub max 4 for Australia
	Fundamental skills Programme / Bluearth	Teaches basic skills (to junior aged children) - likely to increase future participation / health and movement skills development		Both name and attempt at description needed for each mark – BOD names that are not exact eg
	3. PASE (Physical And Sport Education)	A professional development or INSET programme for teachers who do not specialise in PE or develops or improves PE teaching		Sports linkage system Sport People into School etc
	4. Sport linkage scheme	To develop school and club links or a pathway for (talented) children to progress to / join clubs / share facilities / equipment		
	5. Exemplary schools	The sharing of good practice by schools with excellent PE / sport provision		
	6. SportsSearch/Talent Search	Talent ID programme		
	7. State Award Schemes	Prizes for individuals who excel in PE / sport/ the De Coubertin Award (for fair play)		
	8. Sports Leader Programmes	Older students who help teachers or opportunities for coaching / officiating / leading as well as participating		
	9. YDP	Youth Development Programme or quality Outdoor Education programme or D of E		
	10. Sports person in schools project	Elite athletes as role models		
	11. Teacher games	Specific for teachers involving different sports/ t o motivate teachers and inspire students		
	12. Pacific Games	(inter-state) competition or multi-sport event or mini Olympics that inspires young athletes		
		1. SEPEP (Sport Education and PE Project) 2. Fundamental skills Programme / Bluearth 3. PASE (Physical And Sport Education) 4. Sport linkage scheme 5. Exemplary schools 6. SportsSearch/Talent Search 7. State Award Schemes 8. Sports Leader Programmes 9. YDP 10. Sports person in schools project 11. Teacher games	1. SEPEP (Sport Education and PE Project) 2. Fundamental skills Programme / Bluearth 3. PASE (Physical And Sport Education) 4. Sport linkage scheme 5. Exemplary schools 6. SportsSearch/Talent Search 7. State Award Prizes for individuals who excel in PE / sport/ the Schemes 7. State Award Programmes for coaching / Older students who help teachers or opportunities for coaching / officiating / leading as well as participating 9. YDP 1. Sequence Specific for teachers and inspire students Specific for teachers a	1. SEPEP (Sport Education and PE Project) (Sport Education and PE Project) 2. Fundamental skills Programme / Bluearth Bluearth 3. PASE (Physical And Sport Education) 4. Sport Iinkage Scheme 5. Exemplary schools 6. SportsSearch/Talent Search 7. State Award Schemes 7. State Award Schemes 7. State Award Schemes 8. Sports Leader Programmes 9. YDP 10. Sports person in schools project 11. Teacher games Equivalent to UK NC for PE or framework for teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching PE or method that can be adapted or alother teaching Pe ilitely to increase future participation / health and movement skills development PE or development Programme or opportunities for coaching / officiating / leading as well as participating 9. YDP Youth Development Programme or quality Outdoor Education programme or D of E Elite athletes as role models Specific for teachers involving different sports/ to omotivate teachers and inspire students 12. Pacific Games (inter-state) competition or multi-sport event or

Question	Answer	Marks	Guidance
	Comparable UK initiative (sub max 1) 13. Sports Colleges/partnerships Physical Education and School Sport – PESS/PESSCL/PESSYP Gifted and Talented scheme SSCOS Tops programme/Dragon Sport Sportsmark Activemark Step into Sport Junior Sports Leaders (JSLA) School club links Stx60 (Sports) Academies Sportivate National Schools Sports Week Accept other suitable/correct named initiatives 2 hours of PE		Sub max 1 for UK Look for promotion of PE / sport initiatives only Accept 'recently' obsolete initiatives NC is vague

Question			Answer	Marks	Guidance
(b)	_	rks for 5 of:		5	
	Development of Association Football in Australia (sub max 3)				
	Earl	y days:			Sub max 3 for Australia
	1.	(immigrants)	Game linked with (post WWII) immigrants / currency lads / free settlers or clubs or teams (initially) had reference to 'home country' in name		
			(eg Sydney Hellas) or game associated with ethnic rivalry		
	2.	(ghetto)	Game became part of 'ghetto culture' or was a working class game		
	3.	(violence)	Game associated with (spectator and player) violence		
	4.	(rejection)	Game initially rejected / marginalised or Australia wanted own game or derided by being called 'Pommie Game'		
	5.	(concern)	Concern that AF would become the number one sport or concern that AF would become more popular than rugby code/s or Aussie Rules		
	6.	(media/ sponsorship)	Limited media interest or limited sponsorship		
	Mor	e recently:			
	7.	(ethnicity)	teams no longer (can) reference 'home' country in name eg Sydney Hellas now Sydney Knights or reduced ethnic troubles or reduced violence / reduction in discrimination		
	8.	(media/ sponsorship)	More media interest / sponsorship / merchandising		
	9.	(Governing Body)	Governing Body more efficient or has better leadership or game promoted by new Governing Body or National League created (2002)		
	10.	(AIS)	Game supported by Australian Institute of Sport / AIS		
	11.	(role models)	(influence of) role models or Australian players in European league or English Premiership		
	12.	(success)	(raised profile due to): increased success of national team ('Socceroos')		
	13.	(schools)	Game popular in schools or game popular as a community sport		

Question			Answer	Marks	Guidance
	14.	(women) Me	ore popular with women or growth of women's competitions		Sub max 3 for UK
	Comp	parative developm	ent of Association Football in UK		
	Sub r	nax of three marks	s for three from:		
	15.	(mob game)	(Different because:)		
			started as mob / pre-industrial / violent game or developed		
			earlier than in Australia		
	16.	(public schools)	(Different because:)		
			taken into C19th public schools (& 'cleaned up')		
	17.	(Amateurism)	(Similar because:)		
			Amateurism / amateur at school / local club level		
	18.	(working class)	(Similar because:)		
			became working class game or the people's game or factory		
			teams or game of urban industrial Britain		
	19.	(professionalism)	(Different because:)		
			Early professionalism or opportunity for working class to escape		
			from factory		
	20.	(ethnicity)	(Different because:)		
			growth not linked to ethnicity or game linked with class or players		
			have opportunity for upward social mobility / fame		
	21.	(violence)	(Similar because:)		
			some violence by players / spectators BUT not exclusively		
			linked to ethnicity		
			(Similar)		
		, P. /	work done to limit troubles		
	22.	(media/	(Similar because:)		
		sponsorship)	Game linked with 'big business'/massive media impact or		
		(NOD)	influence/reference to 'golden triangle' / commercialisation		
	23.	(NGB)	(Similar because:)		
		(01-1)	FA a 'highly efficient' business or NGB campaigns (eg 'Respect')		
	24.	(Status)	(Different because:)		
	11		UK high status / most popular sport		

Question		Answer	Marks	Guidance
(c)		summer camps – USA	5	
	Sub max of four marks for four from:			Sub max 4 for USA
	1. (adventure)	To experience challenge / adventure / excitement		
	2. (frontier)	To remind young people of the frontier or to remind young people what their ancestors / the pioneers experienced		
	3. (patriotism)	Development of patriotism / loyalty (to USA)		
	4. (natural environment)	Appreciation of natural / varied environment or awareness of conservation issues or to enhance / enrich quality of life or to 'escape from' cities / learn about great outdoors		
	5. (safety)	To learn safety / camp craft / map reading or other skills linked to the natural environment / survival skills		
	6. (social development)	To develop social skills / teamwork / co-operation / leadership / life skills / citizenship or to meet / mix with different people		
	7. (physical or skill development)	To learn or improve sport / physical skills eg hockey or 'soccer' or to develop active / healthy lifestyles or to be more physically active / healthy or preparation for active leisure		
	8. (other)	To study for exams or other example of specialist camps/eg for self-improvement or weight reduction		
	9. (independence)	To develop independence / self-sufficiency (eg by staying away from home)		
	10. (self awareness)	To develop self awareness / self discovery / self confidence / self esteem		
	11. (parents)	To help working parents or to provide 'child care' or to break up / give focus to the long summer break (from school)		
	Reasons for compara	ative limited popularity of Summer Camps – UK		
	12. (tradition)	No tradition of summer camps in UK		Sub max 2 for UK
	13. (shorter break)	Shorter school / summer break in UK than USA		
	14. (environment)	More limited / less suitable environment in UK or less / limited genuine wilderness in UK or less suitable space for camps in UK		

Question		Answer	Marks	Guidance
	15. (family)	Parents don't want their children to be away for the summer or children don't want to be away from home for summer / or not a financial priority or UK has tradition of family holidays (rather than 'sending children away')		

2 (d)* Levels of Response: Compare and evaluate high school sport	in the USA and secondary school sport in the UK
Level 4 (18–20 marks)	At Level 4 responses are likely to include:
 A comprehensive answer: detailed knowledge & excellent understanding detailed analysis and excellent critical evaluation well-argued, independent opinion and judgements which are well supported by relevant practical examples very accurate use of technical and specialist vocabulary high standard of written communication throughout. 	 detailed and direct comparisons successfully made between high school sport in the USA and secondary school sport in the UK detailed evaluation of both systems very well structured.
 Level 3 (13–17 marks) A competent answer: good knowledge and clear understanding good analysis and critical evaluation independent opinions and judgements will be present but may not always be supported by relevant practical examples generally accurate use of technical and specialist vocabulary written communication is generally fluent with few errors. 	At Level 3 responses are likely to include: direct comparisons between high school sport in the USA and secondary school sport in the UK made with some success good evaluation of both systems good structure.
Level 2 (8–12 marks)	At Level 2 responses are likely to include:
 A limited answer: limited knowledge and understanding some evidence of analysis and critical evaluation opinion and judgement given but often unsupported by relevant practical examples technical and specialist vocabulary used with limited success written communication lacks fluency and contains errors. 	 comparisons between high school sport in the USA and secondary school sport in the UK made with limited success mainly stand-alone points about USA or UK some evidence of evaluation of both systems. an attempt of structure.
Level 1 (0–7 marks)	At Level 1 responses are likely to include:
 A basic answer: basic knowledge and little understanding little relevant analysis or critical evaluation little or no attempt to give opinion or judgement little or no attempt to use technical and specialist vocabulary errors in written communication will be intrusive. 	 basic, if any, comparisons made between high school sport in the USA and secondary school sport in the UK focus on USA or UK – lack of balance little or no attempt at evaluation of either system basic if any structure. Some inaccuracies / misunderstandings

Q	uestion	Answer		Marks	Guidance
2	(d)*	Indicative Content: Compare and evaluate high school sport in the UK	ool sport in the USA and secondary	20	
		USA	UK		
			aking part (often considered more apportant than winning Tradition of participation BUT – in some schools, top teams compete at v high level eg accept any school that is known for levels of competition.		
			ewer opportunities to employ becialists on same scale BUT – some schools employ specialist coaches many (independent) schools employ teachers who have played at elite level eg accept suitable example.		
		3. (hire and fire) Coaches or athletic directors have (expendable) contracts • 'Hire and fire' policy • Incentive to win • Reflection of prof sport.	eachers have permanent contracts No hire and fire at school level.		
		4. (exclusive) Exclusive or elitist Highly selective Senior team players as school heroes eg successful players might be given gifts or special treatment from local businesses.	enerally) more inclusive 1 st and 2 nd team opportunities BUT – in some schools there is great competition for places (usually) less hero worship of senior team players.		

Question		Answer		Marks	Guidance
	5. (media)	Media coverage of school games eg TV or newspaper reporters • Success or positive exposure for school enhances school status.	limited or no coverage of school games (generally) some specific newspapers cover some competitions eg Daily Mail Cup (Rugby Union) Success or positive exposure for school enhances school status.		
	6. (scholarshi ps) 7. (excellence)		Not on same scale/not same (generally) BUT – some universities give bursaries to elite performers/help with fees eg TASS/lottery funding/World Class funding. BUT – some sports scholarships available Binding contracts with some Not generally the same		
		 centres of sporting excellence (Possibly) better for producing elite performers. 	 Opportunities more erratic/this may inhibit finding and developing young talent BUT – sports colleges as hub sites for excellence in PE & Sport Some schools have a reputation for sporting excellence 		
	8. (specialists)	Students specialise eg in American Football	Accept comparative point with evidence		
	9. (funding/ business)	High school sport has elements of big business • Sponsorships eg from local businesses • donations from alumni or former students • gate money or paying	Less so/school sport not a money- maker School sport under pressure of limited funding in many schools gate money not charged Alumni donations less common.		

Question		Answer		Marks	Guidance
		spectators.			
	10. (entertainment)	 Entertainment 'Whole town' attends/huge crowds Friday night games to attract spectators Cheerleaders/marching 	Not same generally		
	11. (facilities)	bands/pom pom girls/mascots. Excellent facilities/stadia Mirrors professional sport Superior to most of UK	Less so – more variable • Some independent schools have outstanding facilities eg accept suitable example.		
	12. (equipment)	state schools. High quality or pro standard equipment	Less so – more variable		
	13. (competitions)	Highly competitive Mirrors pro sport prestigious State Champion competitions.	(generally) less so • BUT – some exceptions eg accept suitable examples.		
	14. (support)	Medical backup eg Physiotherapy etc	No generally available in state schools BUT – exceptions in independent schools		
	15. (high status)	(very) high status in (most) schools • Higher status than PE.	Of variable status/less high status than in USA Depends on school management/depends on ethos of school or tradition or status of sport in the (individual) school PE generally of higher status than sport.		
	16. (value)	Intrinsic value/sport for its own sake or as an end in itself	Educational or holistic value/sport part of whole curriculum		

Question		Answer	Marks	Guidance
Question	17. (intra-mural)	Intra mural sport exists recreational sport within the school open to all/more inclusive than representative school teams even so, competition can be intense eg flag football/American football/lacrosse/field hockey/soccer/volleyball or other suitable example. Extra-curricular sport in UK varied levels of seriousness – can be 'for fun' or v competitive.		
	Effectiveness of bo Accept any relevan	•		
	18. (elite)	Good for finding elite performers Increases likelihood of international success eg Olympic success.		
	19. (pathway)	High School (a crucial) part of a well established pathway	-	
	20. (tradition)	This is 'the way it has always been'/an accepted system/works because 'everyone' is used to it or 'everyone' accepts it		
	21. (capitalism)	Effective as it suits or supports or reflects the capitalist system Work hard and success is possible rags to riches possible high school opportunities for sponsors reflects competitive society.		
	22. (support)	Good that High School age performers get the recognition they deserve recognition for the work they put in		
	23. (coaches)	Good for (successful) coaches (and their families) Prestigious career/excellent career opportunities.		

Question		Answer	Marks	Guidance
	BUT:			
	24. (pressure)	Intense pressure on performers/(arguably) too serious		
		May be encouraged to train or play through injury (as so much		
		at stake)		
		May be harmful to their long term health and/or fitness.		
	25. (female)	Male sports have traditionally dominated		
		Females in supporting roles		
		eg as cheerleaders or 'pom pom' girls		
		This has changed or moved on in 'recent' years		
		 Reference to Title IX – equal funding for male and female sports that are federally funded. 		
	26. (BAHL)	Limited opportunities for developing a balanced active and healthy		
		lifestyle for majority		
		Many will be 'lost from sport for life'.		
	27. (clubs)	The limited or lack of a community club system in the USA means that		
		even the best high school players may never play their sport after high		
		school		
		Only very few progress to university sport/		
		scholarships difficult to 'win'.		
	UK			
	28. (NC)	National Curriculum provides a broad and/or balanced PE experience		
	29. (sports	Reference to work of Sports Colleges/PESS/PESSYP/SSCOs in		
	colleges)	providing more sporting opportunities		
	30. (teachers)	Teachers take the teams – positive comment		
	31. (tradition)	Historically or traditionally the more inclusive/less competitive approach has worked well		
		Gives opportunity to teach or develop values through sport		
		eg 'taking part more important than winning'/'the winning is in		
		the effort invested' etc.		
		the chort invested etc.		

Question	Answer			Guidance
	BUT:			
	32. (variable OPE)	OPE variable between schools/not all schools provide as good an experience as others • amount of funding •the quality and quantity of facilities • teachers' skills or time teachers have (due to many and varied other commitments) • time for sport • School tradition • school location • the impact of school-club links – SSCo's etc • provision for gifted and talented • views of senior management towards sport • and (crucially) extra-curricular opportunities.		
	33. (sectors)	Difference in quality of opportunity and/or provision and/or esteem between state and private sectors State sector tends to have less time or less funding for sport State sector tends to have more limited facilities or equipment or fewer specialist coaching staff Independent sectors are often comparatively over represented in county or other representative sides.		

Section B Sports Psychology (Option B1)

C	uestion		Answer	Marks	Guidance
3	(a)	4 marks for 4 of: Why goal setting is in	mportant	4	Accept only an explanation with example
		(motivation) (persistence)	Can motivate/encourage to participate/play/join-in/be healthy. Eg Give target to eat 5 fruit/veg will motivate you to eat healthily Can encourage persistence/sticking or keeping with exercise /		ie must relate to either activity or lifestyle behaviour examples
		,	healthy lifestyle or not giving-up on healthy behaviour Eg Stick to an exercise routine		One practical example could give evidence of
		3. (focus)	Can give direction/focus/end product or you know what to do / to aim for Eg following a better diet or giving up smoking		more than one mark eg give them a small
		4. (anxiety)	Can help to control anxiety/stress/arousal when trying to follow BAHL Eg Targets will take away anxiety/worry about regular exercise		target of losing two pounds a week can motivate them (point 1),
		5. (skills/methods)	Can help to develop skills/methods/strategies in following BAHL Eg Target setting will help you learn to use exercise equipment correctly		as progress can be seen (point 7)
		6. (confidence)	Gives you confidence that you have direction or know what you are doing / increase self-esteem / feel good about yourself Eg Target for cutting down on smoking may raise confidence to give up		(BAHL includes: regular exercise/balanced diet/no smoking/limit of alcohol/no drugs /
		7. (reward/ achievement)	Measured goals can give evidence of improvement/gives reward/positive reinforcement when you have achieved a result related to BAHL Eg Recorded goals attained gives sense of achievement of doing more exercise. or short term goal achievement can lead to long term goals (eg smoke one cigarette a day for a week and then give up completely)		mental health)

Question			Answer	Marks	Guidance
(b)	5 marks for 5 of: (Explanation of cue utilisation)				At least two practical examples must be
	1.	(focus without mentioning arousal)	This focuses attention/concentration/selective attention/perceptual narrowing. Eg a goalkeeper will keep her eye on the ball during a penalty kick		used for more than one mark to be credited
	2.	(arousal)	Attention increases as arousal increases (up to an optimum point). Eg when a hockey player is about to start a competitive game he concentrates on the ball or ignores the crowd		i.e. • No practical examples = no marks
		(low arousal so miss cues)	(but) Low levels of arousal/wide field of attention can lead to poor performance because important/relevant cues are missed or irrelevant cues are attended to. Eg a volleyball player will miss the ball because he is not paying enough attention		 One practical example in answer max of one mark Two or more
	4.	(optimum arousal)	When arousal is moderate/optimal/at the right level then attention / performance can increase because important cues/signals/stimuli can be attended to. Eg a tennis player will be psyched up to return the serve but is under control		practical examples then full marks can be awarded
	5.	(ZOF/confidence)	Enter zone of optimal functioning/in the zone/peak flow experience affecting performance positively because building confidence/well-being leading to good performance. Eg the swimmer will feel that she is confident during the race		Accept reference to inverted U for levels of arousal and cue utilisation but only if
		(high arousal so miss cues)	If arousal continues to increase or is high then this results in narrowing of attention because leading to the missing of vital cues/signals/reduction in performance/poor performance. Eg a netball player loses her opponent because she is too anxious		supporting the points in the MS.
		(high arousal so too much information process)	If arousal is high then processing system could be overloaded/information overload because performer cannot sort out all the information or leads to confusion or the performer 'freezing' Eg a tennis coach is shouting out too many instructions in an important match		
	8.	(hypervigilance)	High arousal can lead to <u>hypervigilance</u> that can be good if very narrow attention needed eg archery but bad if other cues missed eg as a midfield player in football.		

Question	Answer			Guidance
(c)	6 marks for 6 (task-orientee	of: d leader sub max 2 marks)	6	Sub max 2 marks for each style
	1. (Desc)	When leader concentrates on the job to be done or is more concerned with the end product /performance/winning/ (more) autocratic being the best or leader has a predetermined goal Or makes all/most of the decisions.		One mark for characteristic per style One mark for its use
	2. (expl)	When discipline and control is needed/hostile groups or if lack of time or for or in early stage/cognitive stage of learning/beginner or for team players who generally prefer training and instruction style or for males who prefer autocratic style or if in a dangerous situation or when task is clear and unambiguous or if leaders personality is task orientated/autocratic/authoritarian or good in high pressure situations or good for highly favourable/highly unfavourable situations or large groups.		per style Do not accept task or social or laissez-faire in answer unless qualified.
	(social-orient	ed style description and explanation sub max 2 marks) When leader is more concerned with interpersonal relations/is (more)		
	4. (Expl)	democratic Or shares the decision-making. When group members can/wish to participate in decision-making/those who prefer democratic approach or for more advanced performers who have knowledge to contribute or to motivate group members/ownership/feel valued or if demands of situation is social such as a friendly match or when task demands greater interpersonal communication or if leader and group members are well known to each other or females prefer democratic/social approach or task structure is not dangerous or for small numbers/individuals or if leader's personality lends itself to democratic/social approach/when there is more time available or good for moderately favourable situations.		
	(Laissez-faire	style description and explanation sub max 2 marks)		
	5. (desc)	When leader has no direct influence on group members or leader takes a back seat Or leader lets the group members make their own decisions		
	6. (expl)	When high level of performers/the elite performers or to help develop creativity or leader has full trust in members' capabilities or task involves individual decision making or leader is creating an assessment situation/assessing the group members or leader doesn't know what to do.		

Qu	estion	Answer			Marks	Guidance			
(d)* I	Levels of Respo	onse : Explain the positive and negatives effects			1				
	Describe strategies to combat effects of social inhibition								
	l 4 (18–20 mark	•	Disc	criminators at L4 <u>are likely</u> to ir					
A co	mprehensive and		•	explanation showing detailed ki					
•		edge & excellent understanding		understanding of +ve and -ve	aspects of ar	n audience on			
•	•	is and excellent critical evaluation		performance.					
•		dependent opinion and judgements which are well	•	Points consistently supported by					
		elevant practical examples	•	description showing variety of s					
•	•	use of technical and specialist vocabulary		effects and linking some to con	•				
•		of written communication throughout.	•	Use of relevant practical examp		parts of the question.			
	l 3 (13–17 mark	•		criminators at L3 <u>are likely</u> to ir					
A COI	mpetent answer		_	Identifies and attempts to explain positive and negative effects					
•	•	e and clear understanding	•	r cinte modify dapported by payonerogical principles					
•	•	and critical evaluation	•	A variety of strategies to combat the effects of an audience are					
•		pinions and judgements will be present but may not	described but not always backed up with psychological theory			ycnological theory			
	• • • • • • • • • • • • • • • • • • • •	ported by relevant practical examples	 such as arousal Some use of relevant examples in both parts of the question. 						
•	•	rate use of technical and specialist vocabulary	•	Some use of relevant examples	s in both part	s of the question.			
1 01/0		nication is generally fluent with few errors.	Diag	oviminatava et l 2 eva likalı ta iv	aduda.				
	I 2 (8–12 marks ited answer:	6)	DISC	criminators at L2 are likely to in		vo offacto but not in			
•		lge and understanding	Identifies and describes positive and negative effects but not in						
		of analysis and critical evaluation		equal measure; little attempt to explain					
		Igement given but often unsupported by relevant	•						
	practical examp		•	Very few relevant practical example of strategies to		silects of all addience			
•		pecialist vocabulary used with limited success		very lew relevant practical exa	ilibies.				
		nication lacks fluency and contains errors.							
Leve	I 1 (0–7 marks)		ΔŧΙ	1 responses are likely to:					
	sic answer:		 Mostly identifying effects with some description 						
•		ge and little understanding	•	Little or no underlying psycholo					
•		nalysis or critical evaluation	•	Some basic strategies mostly re	•				
•		npt to give opinion or judgement		Practical examples absent or m		•			
•		npt to use technical and specialist vocabulary		ac.isa. champies absolit of fi					
•		n communication will be intrusive.							

uestion		Answer	Marks	Guidance
(d)*		negatives effects of an audience ombat effects of social inhibition	20	
	Explanation of positive a	and negative effects:		
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Arousal/drive/anxiety increased/over-aroused +ve because it heightens your readiness/psychs you up -ve because it causes errors in skills and judgements.		
	`	Dominant response/habit more likely to occur learned responses automatic/motor programmes are run.		
	+ve)	 +ve – if the performer is highly skilled more likely to be helpful well learned/stronger/elite then correct dominant response produced can lead to mastery orientation. 		
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	 -ve – if the performer is a novice then more likely to hinder weaker players/novices then performance deteriorates/incorrect dominant response can lead to learned helplessness. 		
		 +ve – Extroverts likely to perform better with an audience Reticular activating system (RAS) favours extroverts when audience present. 		
		-ve – Introverts likely to perform worse with audience present RAS does not favour introverts		
		If audience in familiar setting performance helped +ve – 'homefield' advantage -ve disadvantage if away/unfamiliar/hostile environment.		
	apprehension)	Anxiety raised by being judged/perceived judgement of others -ve – evaluation apprehension depends on the nature of the audience/who is in the audience +ve could be positive by raising determination/motivation.		
	9. (proximity) F	Proximity of the audience/how close the crowd are to the player		

Question		Answer	Marks	Guidance
		If audience is closer then arousal is higher can be +ve or –Ve depending on other variables eg task/ability/personality.		
	10. (distractions/	-ve – Distractions caused by audience		
	size of crowd)	widening of attentional focus		
	 	utilisation of too many cues		
		+ve - Distraction can help us cope/deal with stress.		
	11. (attention	+ve Attention narrows for those who are used to audiences or		
	narrowing)	those with high levels of ability		
		could make performer even more determined or motivated to		
		concentrate/utilise cues more effectively		
		(optimum) cue utilisation.		
	12. (task variable)	Depends on nature of the task		
)	+ve – gross/dynamic/simple skills helped		
		fine/complex skills hindered.		
	Describe the strategi	es to combat the effects of social inhibition		
	13.	Selective attention or increasing concentration		
		Narrowing your attention/attentional focus		
		Blocking out distractions or taking account of distractions and		
		then dismissing them.		
		eg a gymnast concentrating on the vault before her run up		
	14.	Use somatic/physical relaxation		
		to lower arousal/calm down.		
		eg a sprinter tells himself to be clam before he is called to the		
		blocks		
	15.	Use cognitive/mental techniques		
		to lower arousal/calm down.		
		eg a volleyball player focuses on trying to stay calm before the		
		game.		
		decrease event importance		
	16.	Progressive relaxation techniques to relax body and therefore mind.		
		Relaxing one major muscle group at a time		
		Being aware of the tension and then experiencing its loss.		
		eg a hockey player carries out progressive relaxation technique of		
		tensing and relaxing muscles		

Question		Answer	Marks	Guidance
	17.	 Imagery/visualisation escaping in your mind/thinking of something else to/meditation to take mind away from cue/stimuli that creates anxiety Imagining or visualising success. eg a weightlifter picturing lifting a personal best weight 		
	18.	Negative thought-stopping / positive thinking • reasoning with oneself that there is nothing to worry about. eg a high jump athlete stopping any thoughts of failing the next jump		
	19.	Mental rehearsal imagining actual movement to calm to lower arousal/calm down. eg a footballer going through in his mind the direction of his penalty kick		
	20.	Walk away/removing oneself from the audience physically distancing oneself to escape cues/stimuli of audience. eg a substitute football player warming up away from the crowd		
	21.	Goal setting (that is SMART) can help to manage anxiety strategies to cope with an audience. eg an athlete setting a goal of ignoring the audience throughout the race		
	22.	Practising in front of an audience Getting an audience to evaluate/applaud/boo etc. eg a hockey player practicing a penalty flick with an audience behind the goal		
	23.	Thorough learning of skills		

Section B2 Biomechanics

Question		Answer		Marks	Guidance	
4	(a)	The inertia of a moving object.		bject.	4	
	4 marks for 4 of:					
		1. (Inertia) Reluctance/resistance of a body to change its state of motion.				
		2.	(mass)	Depends on the mass of the body/bigger the mass the greater the inertia.		
		3.	(acceleration)	Resistance to accelerate		
		4.	(deceleration)	Resistance to decelerate/stop when moving.		
		5.	(change direction)	Resistance to change direction.		
		6.	(force)	The larger the inertia of a body the greater the force required to change its state of motion.		

Question		Answer	Marks	Guidance
(b)	Impulse (sub max 3)		5	Do not accept N/s
	1. (Definition)	Impulse = Force x time/Ft/change in momentum/mv – mu		
	2.	Impulse = 400 x 0.1		
	3.	40 Ns (Units must correct)		
	Explanation (sub max 3)			
	4.	Fielder will draw hands backwards at the instant of contact		
		/cushion the ball/softening catch		
	5.	Extending time it takes to stop the ball.		
	6.	This reduces force applied to the hands by the ball.		
	7.	Makes it less likely for the ball to bounce out of the fielder's hands.		
		,		

Question		Answer	Marks	Guidance
(c)	Define the analogue of Newton's First Law of Motion. Explain how a figure skater controls angular velocity when performing a multiple spin about the longitudinal axis. (6)		6	Graphs may show p 5 and 7 with correct axes labelled
	Definition (sub max 1)			
	1. (Analogue of N1)	A body will (rotate) with constant angular momentum unless acted upon by an external torque/moment/angular force.		
	Explanation (sub max 5)	torque/moment/angular force.		
	2. (Angular momentum)	Angular momentum = Moment of Inertia x Angular Velocity/AM = Iω		
	3. (Start)	Angular momentum is generated at the start when an external torque/off centre force is applied to the skater by the ice.		
	4. (Start)	Arms / leg out to give high MI		
	5. (Start)	Low angular velocity		
	6. (During)	Narrower body position or arms / legs brought in to reduce MI		
	7. (During)	Increases angular velocity/spins faster		
	8. (Just before stopping)	Arms / legs out to increase MI		
	9. (Just before stopping)	Reduce angular velocity to prevent over rotation when stopping / land safely / more controlled finish		

Levels of Response : Draw a free body diagramExplain the sha Level 4 (18–20 marks)	pe of the flight path for each of the projectiles At Level 4 responses are likely to include:
 A comprehensive answer: detailed knowledge & excellent understanding detailed analysis and excellent critical evaluation well-argued, independent opinion and judgements which are well supported by relevant practical examples very accurate use of technical and specialist vocabulary high standard of written communication throughout. Level 3 (13–17 marks) A competent answer: good knowledge and clear understanding good analysis and critical evaluation independent opinions and judgements will be present but may not always be supported by relevant practical examples generally accurate use of technical and specialist vocabulary written communication is generally fluent with few errors. 	 Explanation of the three flight paths shows excellent understanding Detailed knowledge and excellent understanding of Magnus and Bernoulli effect demonstrated accurate free body diagrams showing all forces acting during flight Excellent understanding of consequences of forces for three flight paths. At Level 3 responses are likely to include: Explanation of the three flight paths shows a clear understanding good knowledge and clear understanding of Magnus and Bernoulli effect demonstrated Free body diagrams show all forces but there may be some inaccuracies clear understanding of consequences of forces for at least two of the flight paths.
Level 2 (8–12 marks) A limited answer: Iimited knowledge and understanding some evidence of analysis and critical evaluation opinion and judgement given but often unsupported by relevant practical examples technical and specialist vocabulary used with limited success	 At Level 2 responses are likely to include: Explanation of the flight paths shows limited knowledge and/or understanding Limited knowledge and understanding of Magnus and Bernoulli demonstrated free body diagrams attempted but incomplete or with inaccuracies limited understanding of consequences of forces
 written communication lacks fluency and contains errors. Level 1 (0–7 marks) A basic answer: basic knowledge and little understanding little relevant analysis or critical evaluation little or no attempt to give opinion or judgement little or no attempt to use technical and specialist vocabulary errors in written communication will be intrusive. 	At Level 1 responses are likely to include: Explanation of the flight path(s) shows basic knowledge and/or understanding An attempt at free body diagrams basic knowledge and/or understanding of consequence of forces

Question	Answer	Marks	Guidance
(d)*	Indicative Content: (Draw a free body diagramExplain the shape of the flight path for each of the projectiles)	20	
	Free Body Diagram X (Ball with topspin)		
	OF SPIN		
	DW/(MACMUS) FORCE 3		
	Free Body Diagram Y (Shot)		
	- OINECTION OF MOTION		
	(5) AR		
	₩ (4)		

Question		Answer	Marks	Guidance
	Free Body Diagram Z (Ja	velin)		
		DIRECTION OF MOTION		
	BERNOVELI/LIFT/FORCE(8)			
	Free body diagrams			
	1. (FBD X – ball with	Weight acting downwards from CM		
	topspin)	Air resistance acting from CM opposite direction of motion		
	3.	Magnus force acting downwards from CM/surface of ball		
	4. (FBD Y – shot)	Weight acting downwards from CM		
	5.	Air resistance acting from CM opposite direction of motion and significantly smaller than weight.		
	6. (FBD Z – javelin)	Weight acting downwards from CM		
	7.	Air resistance acting from CM opposite direction of motion		
	8.			
	Explanation of FP	Ball with topspin		
	9. (Top of the ball)	Top surface of ball is travelling in opposite direction to airflow.		
		Air travels shorter distance over top of ball.		
	10.	Air decelerates/travels slower		

Question		Answer	Marks	Guidance
	11. (Underneath the ball)	Bottom surface of ball is travelling in same direction as airflow. • Air travels further underneath ball.		
	12.	Air accelerates/travels faster		
		Creates low pressure underneath ball.		
	13.	High to low pressure gradient		
		Causes downwards force to act on ball		
		Aiding the effect of weight.		
	14. (Consequence)	Causes ball to dip in flight		
		Shortening flight path of ball.		
		Causes non parabolic / asymmetrical flight path		
	15. (Shot – forces)	Weight is dominant force.		
		As mass of shot is big.		
	16.	Air resistance is negligible		
		As shot travels slowly.		
	17. (Consequence)	Shot follows a (nearly) parabolic/symmetrical flight path		
	18. Javelin	Javelin assumes an aerofoil shape		
		Most efficient shape that can generate lift while at the		
		same time minimise air resistance.		
	19.	Creates an angle of attack to airflow/the horizontal		
		Lift force will increase as angle of attack increases up to		
		a certain point/about 17degrees.		
	20.	Air travels further over the top of the javelin		
		So air travels faster over the top		
	21.	This creates a low pressure over the top		
		Thus creating a high to low pressure gradient upwards.		
		Creating a lift force/Bernoulli effect upwards.		
	22. (Consequence)	Causing the javelin to hang in flight		
		Increasing the distance travelled		
		Reducing the effect of weight.		

C	uestion		Ans	wer	Marks	Guidance
5	(a)	Identify two types of s	strength. Describe a metho	d used to evaluate each type	4	
		4 marks max				
		Type of strength 1. dynamic strength 3. Explosive/ elastic strength (legs) 5. Strength endurance (abdominal) (arm strength) 7. Maximum	Name of method (wingate cycle test) RAST test (vertical/broad jump) Wingate cycle test 25m hop test (abdominal conditioning/curl/sit up test) (press up test) (1 RM/1 rep max)	Description of method 2. 30 sec max cycle test/pedals against a resistance as a %/75g per kg of body weight/ Running-based anaerobic sprint/ Repeated timed sprints 4. Vertical/forward standing measured jump As wingate cycle test above Flying start hop test over 25m 6. Timed progressive sit up test to a beep (to exhaustion) Press-ups/ sit-ups in a set amount of time (to exhaustion) 8. Any resistance exercise that the		2 marks for 2 correct types of strength (odd numbers) 2 marks for 2 named descriptions (even numbers NB/Accept any other appropriate/or comparable test that is named and described
		strength 9. Static strength	Leg or Hand Grip dynamometer (any named eg) isometric squats	performer can only lift once/1RM Squeeze a handle as hard as possible & record reading 10. Any eg of applying a force against a resistance while held still/isometric		
			frog stand	contraction		

Question			Answer	Marks	Guidance
(b)		arks max max 4 for both evalua	ition and recommendation	5	
			Sub max 4 for evaluation & recommendations	7	
	1.	(Evaluation)	Protein levels good/within recommended guidelines	7	
	2.	(Evaluation)	Fat % too high/above recommended guidelines		
	3.	(Evaluation)	CHO % too low/below recommended guidelines.		
	4.	(Recommendation)	15% Protein/maintain protein intake	+	
	5.	(Recommendation)	Less than 45% fats/lipids/decrease fat intake	7	
	6.	(Recommendation)	More than 40% CHO's/carbohydrates/increase CHO intake		
	7.	(Recommendation)	Follow a balanced diet]	
			Sub max 1 for contrast	4	
	8.	contrast for elite endurance performer	10–15% more/increased CHO's/carbohydrates intake / carbo-loading		

`		Answer	Marks	Guidance
	(Define the terms energy	, work and power and identify a unit of measurement for each).	6	
	6 marks max :			
	Definition and unit of m	easure (Sub max 3)		
	ENERGY			Must have definition
	1. def	Ability to perform work or put mass into motion		and a unit of measur
	Unit of measure	Joules/J/Kilojoules/KJ/calories/Kilocalories/Kcal		for 1 mark
	WORK			
	2. def	When a force is applied to a body or object to move it a set distance/W=force (N) x distance (m)		
	Unit of measure	Joules/J/Newton metres/Nm		
	POWER			
	3. def	Rate at which work can be done or P= force x distance divided by time		
	S. dei			
		or work divided by time or power = force x velocity		
	Unit of measure	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1		
	Unit of measure Explain role of ATP (Su	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all eal work sphate compound/the phosphate bonds are high energy bonds/a store		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic forms of biologic of potential energy phone of potential energy/	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all eal work sphate compound/the phosphate bonds are high energy bonds/a store		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic forms of biologic of potential energy phone of potential energy/	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all cal work sphate compound/the phosphate bonds are high energy bonds/a store gy hate bond is broken energy is released/ATP is broken down to release ADP + P + ENERGY		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic forms of biologic of potential energy phonographs of potential energy/ ATP ATP	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all cal work sphate compound/the phosphate bonds are high energy bonds/a store gy chate bond is broken energy is released/ATP is broken down to release ADP + P + ENERGY eaction		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic 5. high energy phoof potential energy 6. When the phosp energy/ ATP ATP A 7. An exothermic re 8. Facilitating enzy 9. Can be resynthe	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all cal work sphate compound/the phosphate bonds are high energy bonds/a store gy chate bond is broken energy is released/ATP is broken down to release ADP + P + ENERGY eaction me is ATPase esised (via the energy systems/with or without oxygen)		
	Unit of measure Explain role of ATP (Su 4. The only usable forms of biologic 5. high energy phoof potential energy 6. When the phosp energy/ ATP ATP A 7. An exothermic re 8. Facilitating enzy 9. Can be resynthe	or work divided by time or power = force x velocity watts/W or Joules per second or Js-1 or Nms-1 b max 3) form of energy in the human body/energy currency that powers all eal work sphate compound/the phosphate bonds are high energy bonds/a store gy ohate bond is broken energy is released/ATP is broken down to release ADP + P + ENERGY eaction me is ATPase		

(Define flexibilityExplain factors affecting flexibilitycritical Level 4 (18–20 marks)	At Level 4 responses are likely to include:
 A comprehensive answer: detailed knowledge & excellent understanding detailed analysis and excellent critical evaluation well-argued, independent opinion and judgements which are well supported by relevant practical examples very accurate use of technical and specialist vocabulary high standard of written communication throughout. 	 An accurate definition and excellent understanding and explanation of factors affecting flexibility supported by relevant practical examples excellent understanding of at least three types of training Excellent critical evaluation; likely to include judgements relating to different types and practical application of use.
Level 3 (13–17 marks) A competent answer:	At Level 3 responses <u>are likely</u> to include: • A generally accurate definition and clear understanding and
good knowledge and clear understanding	explanation of factors affecting flexibility supported by relevant
good analysis and critical evaluation	practical examples
• independent opinions and judgements will be present but may	clear understanding of at least three types of training
not always be supported by relevant practical examples	 good critical evaluation; likely to include judgements relating to
 generally accurate use of technical and specialist vocabulary 	different types and practical application of use at the top of this level
 written communication is generally fluent with few errors. 	
Level 2 (8–12 marks)	At Level 2 responses <u>are likely</u> to include:
A limited answer:	a definition which is likely to be less than entirely accurate and limited
limited knowledge and understanding	understanding of factors affecting flexibility; May be unsupported by
some evidence of analysis and critical evaluation	relevant practical examples
opinion and judgement given but often unsupported by	limited understanding of different types of training
relevant practical examples	Some evidence of critical evaluation but likely to be mainly descriptive
technical and specialist vocabulary used with limited success	
written communication lacks fluency and contains errors.	
Level 1 (0–7 marks)	At Level 1 responses responses <u>are likely</u> to include:
A basic answer:	A definition which lacks accuracy and little understanding of factors which effect flexibility unlikely to be supported with practical example.
basic knowledge and little understanding little relevant analysis or critical evaluation	which affect flexibility; unlikely to be supported with practical examples
little relevant analysis or critical evaluation little or no attempt to give anining or judgement.	basic knowledge and/or understanding of different types of training ittle relevant critical evaluation:
little or no attempt to give opinion or judgement little or no attempt to use technical and englight vecabulary.	little relevant critical evaluation;
 little or no attempt to use technical and specialist vocabulary errors in written communication will be intrusive. 	

Question	Answer	Marks	Guidance
(d)*	Indicative content Define flexibilityExplain factors affecting flexibilitycritically evaluate different types of flexibility training)	20	Do not accept a LIST. Must at least develop
	1. (Flexibility definition) Range of motion around/possible at a joint/series of joints Dynamic Flexibility RoM taking into account the speed of movement/reflects a joints resistance to movement Eg performing a straddle jump at speed. Static Flexibility RoM at a joint without taking into account the speed of movement/maximum static RoM tissues will allow with an external force Eg when holding still any static stretch Static flexibility a prerequisite/essential to dynamic		each of the factors with at least one bullet point/eg to be credit worthy. ACCEPT positive & negative answers eg increased elasticity increases RoM OR decreased elasticity decreases RoM
	flexibility. Factors affecting 2. Joint type • Eg ball and socket joint has a wider RoM/planes of movement than a hinge joint.		
	 Joint shape/articulating bones Shallow socket of shoulder increases RoM/decreases stability Deep socket of Hip decreases RoM/increases stability. 		
	 Elasticity/length of surrounding connective tissues All points below increase RoM/flexibility if increased Elasticity/length of surrounding muscles Elasticity/length of surrounding ligaments Strength of opposing muscle group Elasticity of Epi/peri/endo-mysium of muscles/fascia joint capsule Nerves/Muscle spindle activation point before initiating stretch reflex. 		
	 Muscle/fat mass Excessive muscle/fat mass can decreases RoM. Eg body builders/rugby players at the shoulder. 		
	6. Temperature/ viscous • warmer internal muscles/connective tissues increase elasticity/RoM.		

Question		Answer	Marks	Guidance
	7. Gender	Females generally more RoM/flexible than males		
		Due to the hormone oestrogen.		
	8. Age	Flexibility/RoM decreases with age		
		Connective tissues harden/decrease in elasticity with		
		age.		
	9. Training	Stretching within a training programme may		
		maintain/increase RoM.		
		Generally more physically active individuals will have a		
	10 01	greater flexibility than those inactive.		
	10. Others	Clothing restrictions eg golfer with waterproof jacket. Dans and		
		Injuries to joint tissues decreases RoM Fitternal terms are time at the Rom Fi		
	Types of training	External temperature +/- to RoM.		
	Types of training 11. Stretching	Stretching is the training method to increase RoM/flexibility		
	Tr. Stretching	There are a number of different methods of stretching.		
	12. Static stretching	Lengthening the muscle/connective tissues 'just beyond'		
	(Description)	the point of resistance'		
	(Decemplian)	Held still/static/relaxed for min 10–30+ secs		
		Stretch reflex subsides after 5/6 secs		
		Connective/soft tissue around joint is lengthened		
		Repeated 3–6 times.		
	13. Static active	Athlete/performer/voluntary/unassisted moves the		
	(description)	joint/muscle into its stretched position		
		No external assistance/force		
		Contraction of an agonist muscle to create force to		
		stretch the target antagonist muscle		
		any appropriate example of a static active stretch.		
	14 Static passive			
	14. Static passive (description)	involves an external force/resistance an portner mayor athlete into a position		
	(description)	eg partner moves athlete into a position ag aguirment wood like Dyna hand/rang		
		eg equipment used like Dyna band/rope any appropriete example of a static passive stretch		
		any appropriate example of a static passive stretch.		

Question		Answer	Marks	Guidance
	15. static stretching	+ = one of the safest/simplest methods of stretching		
	(evaluation)	 + = effective in increasing RoM/flexibility 		
	+ = positive	 + = aids muscle relaxation at end of training 		
	-= negative	 + = aids muscle relaxation 		
		 – = slowest method of increasing RoM/flexibility 		
		 – = fails to prepare muscles for dynamic movements 		
		that may follow		
		 – = possibly decreases subsequent speed/power work 		
		Static more appropriate for maintenance (retaining)		
		present RoM) and developmental (improving RoM) stretching		
		Static maintenance stretching more appropriate at end		
		of session/cool down to return muscles to their pre-		
		exercise length/flexibility when a performer has good		
		RoM/flexibility.		
		Static developmental stretching more appropriate for		
		muscles around joints with poor RoM /flexibility.		
		• Eg 2–3 stretches of the active muscles at the end of a		
		session/cool down.		
		If static stretching used in warm up limit time of the		
		stretch (to max 20 secs) to minimise loss of subsequent		
		speed/power work.		
	16. Ballistic (description)			
		through its full/extreme range of movements		
		eg swinging/circling/bouncing type movements		
		any appropriate example of a ballistic stretch		
	17. ballistic	 + = improves subsequent speed/power to follow 		
	(evaluation)	+ = better suited to more ballistic/dynamic activities eg		
	+ = positive	martial arts.		
	-= negative	-= Limited increase in muscle length		
		-= Greater risk of injury due to momentum/extreme		
		RoM		
		-= creates muscle tension/does not allow sufficient		
		time for tissues to adapt to the stretch		

Question		Answer	Marks	Guidance
		 More appropriate for athletes who are already flexible Ballistic stretching not appropriate for recreational/BAHL performers. 		
	18. Dynamic (description)	 takes the muscle through its full RoM/resistance uses momentum but entry and exit of stretch is under control under more control (than ballistic) does not take muscle to its extreme RoM/point any appropriate example of a dynamic stretch eg lunges, squats. 		
	19. Dynamic (evaluation) + = positive -= negative	 + = less risk of injury as exit/exit/under control + = can be performed active or passively + = improves subsequent speed/power to follow + = better improves dynamic flexibility in most activity - = does not aid muscle relaxation after training More appropriate for athletes who are already flexible Dynamic stretching more appropriate pre-exercise/during warm up. 		
	20. PNF (description)	 Proprioceptive Neuromuscular Facilitation Partner/performer takes joint to a position just beyond its point of resistance/Static stretch and holds the muscle undergoes an isometric contraction against a resistance for min 6–10+ secs muscle is then relaxed and stretched again/process repeated eg contract-relax/CRAC/contract –relax-antagonist-contract/static-contract-relax seeks to decrease/inhibit the stretch reflex mechanism performer usually achieves a greater range of movement in each consecutive/second stretch. 		

Question	Answer		Guidance
21. PNF (evaluation) + = positive -= negative	 + = quicker flexibility gains than static + = Equal/better flexibility gains than other methods + = aids muscle relaxation - = mostly require a partner to assist - = More complex/time consuming technique - = Greater discomfort and risks compared to static. PNF more appropriate for maintenance (retaining present RoM) and developmental (improving RoM) stretching PNF maintenance stretching more appropriate at end of session/cool down to return muscles to their preexercise length/flexibility when a performer has good RoM/flexibility PNF developmental stretching more appropriate for muscles around joints with poor RoM. Eg 2-3 stretches of the active muscles at the end of a session/cool down If PNF stretching used in warm up limit the time of the stretch (max 20 secs) to minimise loss of subsequent speed/power work. 		

OCR (Oxford Cambridge and RSA Examinations) 1 Hills Road Cambridge **CB1 2EU**

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998 Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee Registered in England Registered Office; 1 Hills Road, Cambridge, CB1 2EU Registered Company Number: 3484466 **OCR** is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)

Head office

Telephone: 01223 552552 Facsimile: 01223 552553



