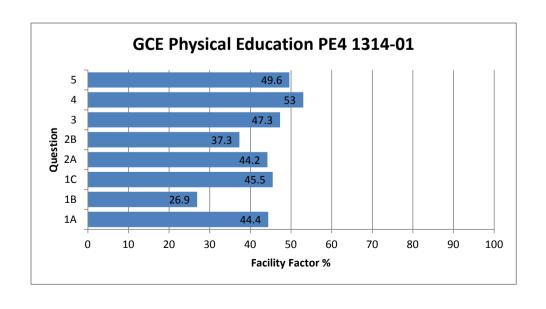


WJEC 2014 Online Exam Review

GCE Physical Education PE4 1314-01

All Candidates' performance across questions

?	?	?	?	?	?	?	_
Question Title	N	Mean	S D	Max Mark	F F	Attempt %	
1A	459	1.3	0.7	3	44.4	100	
1B	459	1.1	1.1	4	26.9	100	\leftarrow
1C	459	1.4	0.7	3	45.5	100	
2A	459	2.7	1.5	6	44.2	100	
2B	459	1.5	1.1	4	37.3	100	\leftarrow
3	459	4.7	1.8	10	47.3	100	
4	378	10.6	3.7	20	53	82.3	\leftarrow
5	81	9.9	3.4	20	49.6	17.6	



SECTION A

Answer all the questions in this section.

1.

Figure 1 shows a diver performing a front somersault in the tuck position during a competition.



Figure 1

(b) In terms of biomechanics, explain how a diver executes a front tucked somersault in order to ensure a perfect vertical entry into the pool. [4]

b)	The diver would use the planes and axis of movement
	to ensure a vertical entrace. By using the transverse
	axis which passes from hip to hip, this will enable
	him to complete the front somersquit. The fronts
	plane will enable him to jump of of the diving
	board, using Newton's law of ment reaction,
	and execute the dive perfectly. On making the
	perfect entry, drag will play a part in order to
	reduce splash etc. The more vertical the diver is, the
	them more writer resistant he will be and so when
	entering water will be able to pass him more eas
	creating a perfect energ.

		F
6)	The diver would use the pienes and axis of movement	
	to ensure a vertical entrace. By using the transverse axis which passes from hip to hip, this will enable	\bigcirc
	him to complete the front somersault. The frontal	
	plane will enable him to jump of of the diving	VO
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	and execute the dive perfectly. On making the	
	perfect entry, drag will play a past in order to	v
	reduce splash etc. The more vertical the diver is, the	\bigcirc
	these more writer resistant he will be and so when	
	creating a perfect entry.	
	General a partie time	l

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	law 3 action/reaction on top of the board. Law
	is when a force is exerted upon a serond
	object (the board) (awsing it and the acelerar
	that takes place to the direction wastin
	which the force act. The The momenten a
	the board forces the performer up into
	The air. The diver executes a front
	weken summersault Changing the politice
	Of the contre of gravity by changing
	the ventre of growing to so through the
	head the persone straightear out in
	Order to achieve The perfect Verticar
	entry into the pool.
	50
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b)	In terms at biomechanics, the aure uses
	law 3 action/neaction on top at the board. Law
	is when a force is exerted open a second
	object (the board) consing it and the aceloras
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1/2	Of the confine of gravity by changing
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	Order to gonive The perfect Vertical
	entry into the pool.
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16	A diver executes a front tucked somescult, and can be
	explained through dionectionics by the way planes and
	and of rotation. The diver is in a possible of a
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	forwards ord/sor beckwards. This squittel plane will
	be perired with a sogitted which ach as a
	pole going through the stomach and outside the beek.
	This axis, like the place, will dow the diver to
	rotate forwards and backwards. The sagistal plane will
	Split the body into left and right side, hearing he
	is only able to spin forwards, or bockwards.

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	and of rotation. The diver is in a possible of a	
	sagitted place meaning he is all to spin (sanganu)	
	forwards and/or backwards. This squitted place will	
	be perized with a sogitted axis which ach as a	
	pole going through the stomach and outside the beek.	
	This assign like the place will dlow the diver to	
	rotate forwards and backwards. The sagritted plane will	
	spirt the body into left and right sides, bearing he	0
	is only able to some banards or packwards.	0

SECTION A

Answer all the questions in this section.

2.

(b) Define the term *learned helplessness* and explain its link with self esteem and disaffection within physical activity. [4]

Question number

6)	Learned helplessness is where the performer feels they
	have no control over the outcome of an event, and even
	if given the apportunity for to get out of the situation
	still do not take it because they feel failure is ineviterbe
	he comed helpresmess reduces self-exteen significantly
	because unen they feel that success is impossible,
	end failure is guaranteed, self-motivation
	decreeves and so will performance as a result.
	Leaned helplessness will increase disaffection with
	the sport because when they think about the physical
	activity, they will associate failure with it. Also,
	when becomed helpleuness occurs, the enjoyment that it
	brings will disappear and so disaffection within the
	sporting activity accurs.

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	activity, Mey will associate failure with it. Also,	\bigcirc
	when bearned helpleuness occurs, the enjoyment that it	
	brings will disappear and so disappearin within the	2)
	sporting activity accuss.	

26	Learned helpiessness is the state of which a individuo
	will fall into after numerous failures or losses. The
	individual will come to believe that failure is
	inemitable the opportunity wifes to succeed
	gentelly an individual who sugges from leaned
	Colplessons will not take it. This will cause self-
	esteen and dissociatection within physical activity to
	decrease quite synificantly. Tweepare, participation is
	Whely to decrease as the individual is not enjoying
	the sport caving disstriction Self-eneen therefore
	needs to herease through the setting of goods in order to
	invegre Notivetion and so to maintain paricipation with
-	He sport.

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	will fall into after nurerow failures or losses. The	
	individual will come to believe that failure is	
	heritable the spotenty wifes to succeed	
	gently, an individual who suffer from leaned	
	tolplessons will not take it this will come self-	
	esteen and dissociate chen within physical activity to	
	decrease quite synificantly. Therefore, participation is	
	likely to decrease at the individual is not enjoying	
	the sport cause dissipation self-eners therefore	<u> </u>
	needs to hereate through the setting of goods in order to inverse possession and so to maintain possession units	
	the sport.	(2)

2b) tearned helphoness is a predetermined ideal
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a failure to a make task difficulty the performe
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links to disappearion is sport as the performed
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and will loose intensit very quickly.

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again. In the same way tearned helplemers
finks to disaffection is sport as the performer
when't want to participate thempete again
and will loose interest very quickly.

SECTION B

Answer one question only in this section.

4. High level sports performers rely on extensive scientific and technological support in order to succeed at the very highest levels.

Discuss the role that technology plays in supporting the elite athlete before, during and after competition. [20]

4	There is a concept that sport mirrors society and
	with technological developments occurring in general
	life it o inevitable that this will be conficed
	through to sport. This how affected the exite athrese
	in various ways on air aspects of sport.
	Firstly, prior to competition new technological
	developments have suggested elite athreter in the
	analysis of their opposition. Who Prozone is a performance
	analysis programme used by many clubs in the Premier
	heague, which allows coaches and performers le
	identify not only their weatherever are strengths, but
	their opponents too. By ving data derived from the
	Prozone, performers are dole to come up with tactions
	aspects six as patterns of play that will be must
	effective on that particular opponent. This can lead to
	a greater self-confidence of the performer going into the
	game and so shows thest technological aspects can
	support the abolite before druncitically, by improving
	their mental state.
	Further technological developments into sports
	science has given new nutritained benefits prior to
	competition the such as carbo loading. Nutritioned
	benefits like this arrow attrictes to perform better
	in competition due to the increased energy levels
	that are achievable are so consecuoly neep the
	athlete especially in sports such as marethans
	These becomplegical advaces prior to competition
	could possibly read to exte yellomen becoming
	over-reliant on technology and lawering their
	work rate themselves, because they feel that
	the technology win load them to success. This
	of who has some with technology supporting athleter
94	of whether competition within sport is becoming
	an un-level playing field. This is particularly a
	problem is the FI, where it has become a
	buttle of who has the best car, rayher then who

is actually the best driver. For example, hewir
Hamilton in the 2013 Grand Prix season Brished
6th avesals on the table however at the start of
the 2014 Grand Prix season he was 4 consecutive
races. This states the retirance that is being put on
the costs equipment used to enhance performance
displaying that sport may be becoming a bastle
of who has the best technology rather than a
competition of obility.
During competition the technology support for
elite athletes a vast. with the introduction of good
line technology and houseye in terris and cricket,
performen can now be sole whether or not correct
decocon have been made.
Also, with technology such as wind tunnels
His has entitled a biomechanizal aspect to improve
performance during competition. Team GB cycling
term use wind turnels to identify the most accordinate
political of cejung, as well as the tight his againg
suits and aerodynamic heimets. This ispends the
elite performed by receiving their times without actually
improving their ability, and so gives a competitive
codvantage over opposers. This technological coveres
in elite sport has also led to benefit for may
participation los however. With Tean GB-, success in
the 2012 olympic in cycling, this the increased role
models such as Chris Hoy and Bradley wigging,
influencing young people to got involved in cycling.
Furthermore, participation level increased drancationally
and so the technology advances had not only on
impact an elite perferned within elite sport, but
derived adventuges on the neath of the noison.
The technological advaces nay not in fuct be
that beneficial for elite sport however, in that the
becomology a very expensive and so a now accessible
for everyone, in terms of between countries and
between social dayles. Countries in Africa which

are unable to afferd the technology are very limited in their choice of sport because most sports hemily return on the technology. This for example with not be object to take eventhough they deady have the endwance level. A prime Mark Carealish who was originally from kenya but moved to England and so made it as an elite because the necessary equipment that technology for some whole elite competition way be necknively offected because the total hest athletes are not given the apportunity to exces After competition technology has had many buths. recovery, and there are also technological speed up recover time from this enables artheres to recover more so are able to train more before the Collioning conpetition. It could also be argued that the technological developments have beganded given reductions devience too. with replays, officials able to identify incidents that went unoticed and can furthermore be biling lyanovia in technological primery to pertoner many Finished, which the mater had ney advances gime / compension. negative purh of the gime A fines technologica colorcement, the

number	
	supported elik attretes dites competition is new
	supplementation. Supplements with as prolein and execute
	are being used for more regularly in order to speed
	up the vectory process once again, and so we
	benchica to generas
	The performence encelying her also been improved
	Per the exite athlete becomes improved vales analysis
	has accounted objective information to be obtained.
	With approaching such as "coache's eye" on the itea,
	hopesto this prometion can be used to improve
	technique after competition, helping future
	performeres
	To conclude, it is evident that technology
	does improve all supects of a elite athlete's
	competition; before during and after. Monerer it is
	Por word technology are not become the pure vavis
	for success, are me sport's individual organizations
	should regulate how for it can go, much like the
	swimming association did with the Speedo LZR
	suite to receipt the spection inches dispersive;

There is a concept that sport mirrors societies and with technological developments occurring in general life it is inevitable that this will be conficed. Howays to sport. This has affected the exist athreve in various ways on all aspects of sport. Firstly, price to competition new technological developments have supported elite athretes in the availysis of their opposition. White Province is a performent analysis programme used by many clubs in the Premier beauty programme used by many clubs in the Premier beauty in programme used by many clubs in the Premier beauty of any their apparents are strengths, but their apparents too. By ming dark derived from the Province performent are able to come up with factional aspects sum as patterns of play that with be methoday for the sum of patterns of play that with be methoday and to so show their technological caspects can apport the athrete before drancitically, by improving their mental state. Further technological development into sport to competition the given here given new autilitional beaching poor to
with technological developments occurring in general life it a ineutable thous this will be confeed through to sport. This has affected the edite athlete in various ways on all aspects of sport. Firstly, proor to competition new technological developments have supported edite athletes in the analysis of their opposition. The Provine is a performence analysis programme used by many district the Premier heague, which allows couches and performers le identify not only their weatherstes are strengths, but their appoinents too. By using darks derived from the Provine performers are able to come up with tractions aspects sun as particular appoinent. This can pead to a greater self-confidence of the performer going into the export the athlete before dismatricular by improving their mental starte. Further technological development into sports Science has given new autilitioned benefits prior to
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