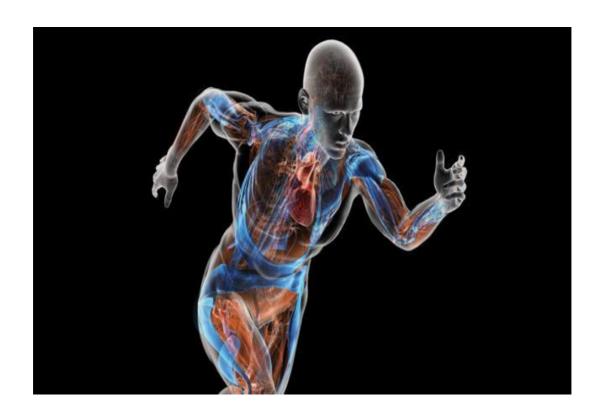


Opening doors to a brighter future

# A-Level PE SIL



## EAPI Task (15%)

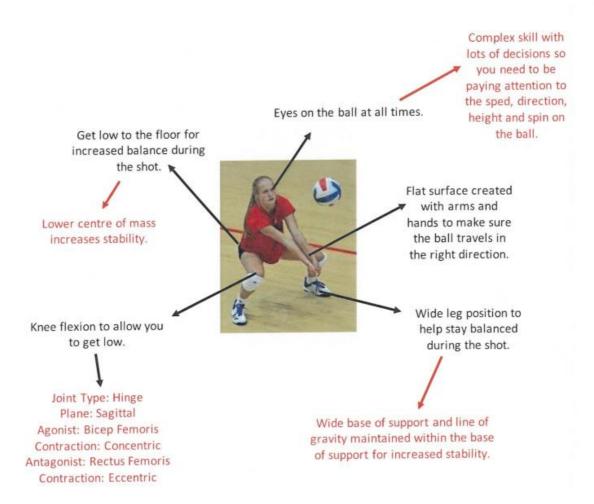
## Practical Sport Specification. Go to PAGES 38 & 39

#### **INSTRUCTIONS:**

Find your sport from the list
Find still images and create a workbook containing one image per page, per skill including:
ALL core skills
ALL advanced skill
ALL decisions

Annotate images to show the correct technical model for every core and advanced skill in **your sport.** Make links to A-Level PE topics to back up the points made.

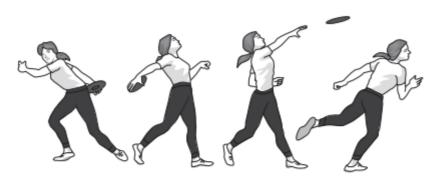
See the example below...



## Click On the following playlist to help you complete these tasks:

### **James Morris PE**

(a) The images show an athlete throwing a discus with their right hand.



Complete the table to analyse the movement at the right shoulder and right hip during the discus throw.

Joint	Movement	Agonist muscle	Antagonist muscle	Type of contraction
Shoulder				Concentric
Hip	Medial rotation			

[6]

(b) Give two structural and two functional characteristics of fast oxidative glycolytic muscle fibres.

Structural characteristics:	
1	
2	
Functional characteristics:	
1	
2	 [4

● OCR 2024

Explain how the conduction system of the heart controls the systolic phase of the cardiac cycle.
[5]

(d)	Analyse the effect of recovery on gas exchange at the muscles after exercise.
	In your answer refer to the changes in the pressure gradients and the changes in the dissociation of oxyhaemoglobin.
	[5]

2 (a)	Individuals may choose to use ergogenic aids to enhance their performance.
	Explain the use of pharmacological aids to benefit the performance of a weightlifter.
	[5]

(b) (i)		e ability to produce a maximal amount of force in one or a series of tractions."	of rapid muscular
	Put	a tick (✔) in the box next to the type of strength defined above.	
	Α	Explosive strength	
	В	Maximum strength	
	С	Static strength	
	D	Strength endurance	[1]
(ii)	Whi	ich one of the following is a long-term adaptation from maximum s	strength training?
	Put	a tick (✓) in the box next to the correct answer.	
	Α	Increased aerobic enzyme production.	
	В	Reduced bone density.	
	С	The stretch reflex occurs more readily in the antagonist.	
	D	Tolerance of lactic acid increases.	[1]
(iii)	Des	scribe a training session to improve the most appropriate type of s	trength for a high jumper.

(c) (i)	Explain one benefit of good hip fle	xibility for a performer in a sport of your choice.	
			[1]
(ii)	Describe the use of a goniometer t	to measure flexibility.	
			[3]
(d)	Periodisation is the organisation of	f training into specific blocks or phases.	
	Complete the table to show your k	nowledge of the periodisation of training.	
	Periodisation term	Description	

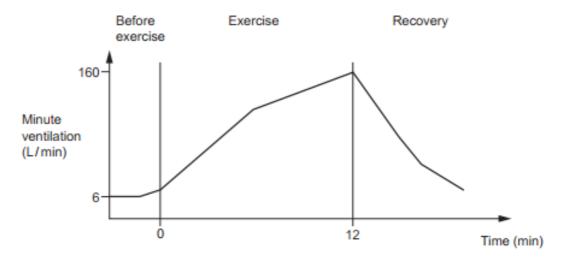
Periodisation term	Description
Preparatory phase	
	Fitness is maintained; focus is on tactics and strategies.
Tapering	
	Active rest and recuperation.

[4]

3 (a)	Apply Newton's three laws of motion to the example of a footballer taking a penalty kick.
	First Law:
	Second Law:
	Third Law:
	[6]

d)	Discuss the benefits of the use of limb kinematics and wind tunnels to optimise performance in sport.
	Limb kinematics
	Wind tunnels
	THIS WINGS
	[5]

4\* The graph shows the minute ventilation of a performer with high aerobic capacity completing and recovering from a multistage fitness test.



Use your knowledge of the regulation of breathing to explain the changes in the performer's minute ventilation shown in the graph.

Evaluate both continuous training and high intensity interval training (HIIT) as methods used to

improve aerobic capacity for games players.	[10]

● OCR 2024 Turn over

00	OCR 2024

END OF QUESTION PAPER