

# Synoptic links for 9-mark questions

Area of the specification	Context of the question	Typical synoptic links
Aerobic and anaerobic energy	<ul style="list-style-type: none"> <li>• Aerobic/submaximal performance</li> </ul>	<ul style="list-style-type: none"> <li>• Glucose + O<sub>2</sub> goes to CO<sub>2</sub> + H<sub>2</sub>O + energy</li> <li>• Long duration, moderate intensity</li> </ul>
	<ul style="list-style-type: none"> <li>• Anaerobic/maximal performance</li> </ul>	<ul style="list-style-type: none"> <li>• Glucose goes to lactic acid + energy</li> <li>• Short duration, high intensity</li> </ul>
Diet	<ul style="list-style-type: none"> <li>• Aerobic/submaximal performance</li> </ul>	<ul style="list-style-type: none"> <li>• Increased carbohydrate consumption in the diet to provide more glucose for aerobic respiration</li> </ul>
	<ul style="list-style-type: none"> <li>• Anaerobic/maximal performance</li> </ul>	<ul style="list-style-type: none"> <li>• Increased protein consumption in the diet to maximise anaerobic adaptation and repair tissue</li> </ul>
Hydration	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Before, during and after</li> <li>• Essential for cell function</li> <li>• Essential to prevent loss of concentration/mistakes</li> </ul>
Mental preparation	<ul style="list-style-type: none"> <li>• All but try to focus on times before, during or after performance when the techniques can be used.</li> </ul>	<ul style="list-style-type: none"> <li>• Deep breathing exercises prior to the whistle</li> <li>• Use of imagery to increase confidence</li> <li>• Mental rehearsal to control arousal</li> <li>• Self-talk to block negative thoughts</li> </ul>
Recovery from exercise	<ul style="list-style-type: none"> <li>• Particularly important for anaerobic</li> </ul>	<ul style="list-style-type: none"> <li>• Thorough cool-down to remove lactic acid</li> <li>• Ice bath to flush muscles</li> <li>• Massage to remove toxins</li> </ul>
Goal setting	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on SMART</li> <li>• Name a SMART target such as "over 6 weeks, increase 1 rep max score by 5% on every lift."</li> <li>• SMART targets increase motivation levels.</li> </ul>
Motivation	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Intrinsic motivation is the most powerful and comes from the desire to participate or succeed.</li> <li>• Extrinsic motivation such as rewards can be tried.</li> </ul>
Principles of training	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Apply the FITT principle - more, more intense, longer and more varied training over time.</li> <li>• Don't overtrain or injury will occur and reversibility will occur</li> </ul>
Arousal	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Find the right arousal level for peak/optimal performance.</li> <li>• Use mental preparation techniques (see above) to control arousal.</li> </ul>
Basic information processing model	<ul style="list-style-type: none"> <li>• All</li> </ul>	<ul style="list-style-type: none"> <li>• Input - senses</li> <li>• Decision making - using memory to compare to previous experiences and deciding how to move</li> <li>• Output - nerve impulses and muscle contractions</li> <li>• Feedback - information on how it is going/went</li> </ul>

