Answers to Test your knowledge questions

Nelson Physical Education Studies for WA 2A,2B

Chapter 13

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multiple choice

1 A

2 A

3 D

4 C

short answer

5 (max 4 marks)

- Pilates is an exercise that develops core strength. (1 mark)
- This is important in most movements but particularly with bowling and serving. (1 mark)
- Good core strength helps diminish the chance of injury to the back. (1 mark)
- Also assists with mental well-being through breathing techniques and helping relaxation. (1 mark)
- A reduction in feelings of fatigue. (1 mark)

6 (max 2 marks)

- Static stretches decrease the eccentric strength of a muscle. (1 mark)
- This weakening of the muscle can lead to an increase risk of injury. (1 mark)

7 (max 2 marks)

- Plyometrics utilises the stretch reflex in the body. (The stretch-recoil characteristics of skeletal muscle) (1 mark)
- When jumping from a height and immediately following this with a concentric contraction energy is added to the action. (1 mark)

8 (max 1 mark)

This question can be answered in a number of ways.

- Changes to be more of a power or ATP–PC adaptations rather than aerobic. (1 mark)

or

- Allows for a larger adaptation as the next set can be performed at a greater intensity. (i.e. with weight training allowing the ATP-PC system to fully recover) (1 mark)
If the rest is too great the body will not be overloaded enough and hence the adaptation will be smaller. (1 mark)

**Essay Style**

9 (max 10 marks)

a It keeps the training program specific to the requirements of the sport. (1 mark)

b

- Allows for a higher intensity for more time over the whole training session. (1 mark)
- Breaks the monotony of a continuous session (1 mark)
- Less feeling of fatigue (1 mark)

c

- An endurance athlete is training at a lower intensity with a lower eccentric phase. This requires less recovery time. (1 mark)
- A sprinter utilises the ATP–PC and lactate systems which quickly fatigue and need time within a training session to recover. (1 mark)

d

- Nutrition – high carbs, some protein to replenish fuel stores (1 mark)
- Hydration (1 mark)
- A light active recovery to allow the body to replenish muscles, stop venous pooling and remove toxins. (1 mark)

e HR monitoring, lactate testing, running speed (1 mark)

f Performance of the athlete (improvement) (1 mark)

10 (max 5 marks)

*Answers will depend on the chosen sport.*

a *Example sport – javelin*

b High power sport: ATP–PC system would be dominant. (1 mark)

c

- The time it takes to complete the movement (1 mark)
- The amount of rest between trials (1 mark)
- Intensity of movement (1 mark)

d

- High-intensity short bursts to mimic the sport. Rule of specificity. (1 mark)