**ATAR 12 Physical Education Studies**

**Unit 3 and 4**

***Motor Learning and Coaching***

Name: Marking Key

*TIME ALLOWED FOR THIS PAPER*

Reading time before commencing work: Five minutes

Working time for paper: Fifty minutes

Section 1 - Multiple Choice

Section 2 - Short Answer

Section 3 - Extended response

**Section 1**

1. Which of the following statements best describes an authoritarian coach?
2. A netball coach allows the players to pick their own positions for the last quarter of the game.
3. A hockey coach meets with each individual player at the start of the season to consult with them regarding their personal goals for the year.
4. A basketball coach confers with his coaching staff which players should start the game.
5. A soccer coach deciding who will be captain for the game on the weekend.
6. When Physical Education teachers introduce new skills, they explain and demonstrate the skill, normally reinforcing key teaching points. This teaching strategy is an example of which type of transfer of learning?
7. Skill to Skill
8. Proactive Transfer
9. Training to Competition
10. Theory to Practice
11. Coaches use video footage and observational checklists to assist athlete performance. These are examples of
12. Qualitative Analysis
13. Quantitative Analysis
14. Subjective Analysis
15. Motion Analysis
16. Different teams and varied situations are suited to particular styles of leadership. An autocratic style is best suited when:
17. the team is full of experienced older players.
18. the team cares more about social cohesion compared to task cohesion.
19. players skills must be improved to enact a difficult game plan.
20. players have ideas about preparing better for games.
21. The athlete practices the triple jump by sequentially combining the run-up, hop, step and jump phases. This is an example of
22. Shaping
23. Front loading
24. Progression
25. Chaining

**Section 2**

1. An athlete that engages in reflective learning is one who is readily involved in seeking and analysing feedback and information to improve sporting performance.

(a) Identify the stages that an athlete would undertake when engaging in the reflective learning process. (4 marks)

|  |  |
| --- | --- |
| Description | Marks (4 total) |
| * Reflection – thinking about performance * Recognition – identifying areas of improvement * Planning – what can be done to improve * Action – the ‘doing’; execution of the “Planning” phase | 1 mark each step with a brief explanation |

(b) Describe one method of reflection that the athlete could use during the process.

(2 marks)

|  |  |
| --- | --- |
| Description | Marks (2 total) |
| Student identifies any of the following examples or other suitable example, with relevant description:   * Reflective Journal – monitor what has been achieved; future plans; record goals; record objective and subjective analysis of training and/or competition * Observation schedule – record of athlete progress for comparison * Mentor – knowledgeable and respected colleague to support and provide constructive feedback * Video analysis – for performance analysis; * Other relevant example | 1 mark for suitable method  1 mark for description |

1. There are several different coaching strategies a coach can employ during a training session to improve the execution of selected skills. For example, teaching a skill as a static drill or as a dynamic drill. Explain, with relevant examples, two other coaching strategies that may be utilised during a session.

(4 marks)

|  |
| --- |
| Description |
| Student can pick any **two** of the following:  **Simple skills**   * Coach simplifies the skill by reducing the number of components or subroutines * Reduce amount of concentration required * Small amount of practice required * Example – passing or other suitable example   OR  **Complex skills**   * Coach increases the number of components or subroutines * Closer resemblance of the skill in a competitive situation * Requires more attention, coordination * Repetitive practice required * Example – Lay up or other suitable example   OR  **Shaping**   * Incomplete skill practiced with gradual adjustments * Skill is simplified to start * Most important aspects practiced initially * Example – Swimming or other suitable example   OR  **Chaining**   * Skill is broken down into parts, each practiced individually, then linked together * Can be forward or backward * Example – Triple jump or other suitable example |

1. Your friend approaches you about her poor performances recently in her State League Netball games. She is seeking some advice from you about how to get back to playing at her best.
2. Discuss how your friend could use either video analysis of the game or a checklist of her skills to improve her performance. (6 marks)

|  |  |
| --- | --- |
| Description | Marks (6 total) |
| Students should have chosen one option – video or checklist, both are worth 6 marks. Do not mark both as question asks for them to chose one.  Video Analysis  Students should discuss the following points   * Set up camera in appropriate location – video quality * Purpose of watching the video – game play or skill execution * Recording method – athlete must write down what they are watching * Identify reason for errors – physical skill, physical fatigue, mental skills * Develop an action plan to counter errors observed in video * Discuss with coach and place counters in training   Staff to use professional judgement but there should be several steps (preferably 6 steps – 1 mark for each)  Skills checklist  Students should discuss the following points   * Establish a skills checklist – can use coach/mentor * Recording method – athlete must write down what they are feel they are doing * Have 2nd and 3rd parties observe skill to provide feedback * Identify reason for errors – physical skill, physical fatigue, mental skills * Develop an action plan to counter errors observed in video * Discuss with coach and place counters in training   Staff to use professional judgement but there should be several steps (preferably 6 steps – 1 mark for each) | 6 marks for either strategy (1 mark for each step)  6 marks for either strategy (1 mark for each step) |

1. Of the two augmented feedback types; prescriptive (describing the problem and prescribing the solution) or descriptive (describing the problem), justify which is more appropriate for a performer in the early associative phase of learning.

|  |  |
| --- | --- |
| Description: | Marks total |
| Prescriptive feedback describing the problem and prescribing the solution, is more appropriate for the beginner.  They are most likely unaware of how to correct their errors, so the coach should guide them with the provision of a solution. | 2 marks |

Question 10. (3 marks)

In the image below (Figure 7) an attacking player is practicing their goal scoring capacity using a header whilst the goal keeper is also training their defensive skills – undertaken in a game-like environment.

Figure 7. Players undertaking a game-like simulation at training

(a) Identify the type of transfer of learning this situation represents. (1 mark)

Answer: Training-to-competition.

(b) Identify two ways the practice should imitate the game-like situation. (2 marks)

Answer:

Choose two of the following: The practice should imitate the competitive situation, by incorporating into the training session:

• the aspects of the skill

• the context of the skill

• the perceptual stimuli (visual, proprioceptive and auditory cues)

• the time critical nature of making decisions and responding to those stimuli.

**Section 3**

1. (15 marks )

16 year old, Mikayla George is in training to become Australia’s first indigenous aerial

skier. Similar to others before her, such as Lydia Lassila, Alisa Camplin, and Kirstie

Marshall, Mikayla originally competed in gymnastics, before converting to aerial skiing.

1. Define Transfer of Learning, and explain two factors that may have an impact on transfer. (3 marks)

|  |  |
| --- | --- |
| Description | Marks (3 total) |
| Definition of Transfer of Learning   * Transfer of Learning is when the understanding and execution of a skill, strategy or tactic has an influence on the learning and performance of another skill, strategy or tactic.   Any two of the following:   * The greater the amount of physical similarity between the skills, the increased chances of transfer occurring. * If there are similarities between skills, but the differences are significant, negative transfer will occur. * The more autonomous a skill is to an athlete, the more likely transfer will occur. * The skills contain similar information/cognitive processing. * Performance environments are similar. * Coaches provide opportunities for transfer. * Tactics between the two sports are similar. | 1 mark for definition  1 mark each for any of the following factors. Max of two. |

1. Identify and explain the type of transfer that Mikayla may have experienced during the swap to aerial skiing. Using examples, discuss the effects of transfer of learning Mikayla may encounter during her transition. (12 marks)

|  |  |
| --- | --- |
| Description | Marks (12 total) |
| **Skill to skill transfer**   * Definition – Previous skill or practice influences a new skill   **Application to scenario**   * Twists * Somersaults   **Positive transfer**   * Definition – previous experience helps performance or learning of a new skill   **Application to scenario**   * Similar information/cognitive processing * Performing somersaults and twists in the air * Landing * Balance   **Negative transfer**   * Definition – previous experience hinders performance or the learning of a new skill   **Application to scenario**   * Landing height – gymnastics has same landing height as take-off height. Aerial skiing has a higher take-off than the landing height. * Landing surface – mats v. snow & downhill slope * Extra weight carried in aerial skiing (clothing, skis, boots, helmet) impacts moment of inertia, therefore rotations are harder to initiate and stop * Environment conditions – cold, snow as opposed to a more controlled inside environment | 1 mark for definition  1 mark for application to scenario  1 mark for definition  4 marks for application to scenario  1 mark for definition  4 marks for application to scenario |

**Question 17. (15 marks)**

Figure 13. The javelin throw (a) and throwing a vortex (b)



(b)

(a)

1. When learning to perform a standing javelin throw, a Year 8 PE teacher might ask the students to first use a vortex rather than a javelin. Define both chaining and shaping and identify which method is being used by the teacher. (3 marks)

Answer:

Chaining involves the skill being broken into components that are rehearsed separately, as they are two isolated skills. (1 mark)

Shaping is when a simplified or incomplete version of the skill is performed. (1 mark)

When choosing to undertake the standing vortex throw first the teacher is using shaping. (1 mark)

1. An example of a visual cue is ‘enhancing the visual environment’ to assist the learners understanding of how to execute the task. Identify and describe the key qualities of two other visual cues that could be used by a PE teacher. (4 marks)

Answer:

Demonstration: an accurate model or demonstration of the throw with the learner’s attention drawn to key components of the skill.

Visual aids: Graphs, flow charts, pictures, mirrors and diagrams are all visual aids. The most commonly used aid is video of high-performers or a recording of the learner themselves.

1. The Year 8 PE teacher, when teaching javelin to a class of 30 students, is concerned for student safety and providing the best learning opportunities. Describe two leadership styles that are less suitable when organising and teaching the students to throw javelins. Also, justify with three reasons to account for the leadership style that is most appropriate. (8 marks)

Answer: less suitable

Laissez-faire: lets the athletes do as they choose. A casual and relaxed atmosphere, with students choosing to participate as they please is likely to increase risk and minimise the opportunities to learn. (2 marks)

Democratic leader: consults, asking the group to be a part of decision-making. The students are likely to be inexperienced and will not have their own answers to safely engage in performance and may not be intrinsically motivated for the task. (2 marks)

Answer: most suitable

Predominately use an autocratic leadership style (1 mark)

The autocratic leadership style is appropriate because it will assist to (Choose three of the following: 3 marks);

Develop with support and answers

* Eliminates distractions and provides answers. That is, students can get on with the core business of performing safely and learning.

It will suit these students who value or require extrinsic motivation

* Business like and driven – provide an extrinsic motivation to students.
* Role model and set the tone for everyone’s effort, intensity and performance.

Students who value extrinsic setting of benchmarks and are goal driven

* Students who will benefit from want to know where they stand.
* Clarity on performance indicators criterion are established.