**Contemporary Issues in Physical Activity and Sport**

**Modern Technology in Sport**

**Key Terms**

* **Prosthetic –** An artificial device that substitutes or supplements a defective part of the body.
* **Hypoxic Chamber –** A sealed room that simulates high altitude.
* **Precision Hydration –** The monitoring of sodium loss during sweating leading to more effective replacement in the body of essential salts.
* **Gene Therapy –** The use of genes and genetic elements to treat human disease.
* **Punditry (in Sport) –** Typically, a knowledgeable or experienced person who, through the media, offers their opinion, guidance or commentary on a particular sport.
* **Motion Capture Analysis –** The process of recording and then analysing the movement of objects or people.

**Benefits for Elite Sport**

**Fair Outcomes:**

**Advantages and Examples:**

**Disadvantages and Examples:**

**Modern Technology**

**How does Modern Technology reduce General Participation?**

**Entertainment:**

**Advantages and Examples:**

**Disadvantages and Examples:**

**How does Modern Technology increase General Participation?**

**Why Athletes Drop out of Elite Sport/Programmes?**

**Strategies to Prevent Athletes Dropping Out of Elite Sport/Programmes:**

**Past Paper Exam Questions**

1) Suggest two ways modern technology increases the pressure on officials in sport (2marks)

2) Describe four ways modern technology has made televised sport more entertaining for viewers (4marks)

3) Goal-line technology was introduced in football to assist referees in making decisions as to whether the ball has crossed the line and a goal had been scored.

The results of a poll taken of 100 spectators’ views immediately following a football match were that:

20% stated that they were against the introduction of goal-line technology.

80% were in favour of goal-line technology

Why might some spectators be against the use of goal-line technology and others be in favour of its introduction? (2marks)

4) The chairman of the US Tennis Association in the late 1970s was asked about the effectiveness of newly designed tennis rackets. He stated that ‘you can play with a tomato can on a broomstick if you think you can win with it’. Discuss the reasons why new technology has divided opinion amongst many that participate in sport (6marks)

5) Sport England’s ‘Active People Survey’ for 2014/15 shows that more disabled people are taking part in sport, with 17.2% playing sport regularly, up from 15.1% in 2005/6. Using examples, explain three ways in which modern technology may have contributed to increased participation in sport by disabled people (6 marks)

6) State how the technological development of facilities and equipment can help to optimise elite performance (4marks)

7) Modern technology is part of contemporary sport. Discuss positive and negative impacts of modern technological products on sports performance (4marks)

8) Explain how modern technology can impact on performance in sport. Use a different example of modern technology to support each of your points (5marks)

9) Modern technological products are a key feature of contemporary sport. Outline advantages and disadvantages on performance in sport of using modern technology. Use examples of specific technology to support each of your points (4marks)