**Physiological and Acquiring movement skills**

**ASSESSMENT 4 ANSWER SHEET**

**Q1**

A ball and socket

Femur/ Ilium/ Ischium/ Pelvis

Gluteus maximum

**[3 Marks]**

**Q2** Using your understanding of the muscle fibres, state the recovery time ratios for slow oxidative and fast glycolytic muscle fibres.

Slow oxidative recovery is 1:1 or 1:0.5

Fast glycolytic is 1:3

**[2 marks]**

**Q3** Which of the following is a true definition of Action Potential?

**Put a tick (☑) in the box next to the correct answer.**

1. A chemical neurotransmitter which helps to transmit nerve impulses

across the synaptic cleft. **☐**

**B.** All muscle fibres will be contracting or none at all. ☐

**C**. A muscle that works with the agonist muscle to produce movement ☐

**D. The change in electrical potential associated with the passage**

**of an impulse along the membrane of a muscle cell or nerve cell. ☐**

**[1 Mark]**

**Q4**

1. Developing movement or motor skills is important if you wish to follow a balanced, active and healthy lifestyle. Describe what is meant by fine, closed, high organisation and low organisation movement skills. Use examples of motor skills to support your answer. **[4marks]**

**1 mark per point max 4**

(Each must be accompanied by a suitable practical example)

• (fine) small muscle movements/intricate movements;

• (closed) not affected by the environment/predominantly habitual/open loop movement/internally paced;

• (high organisation) continuous/one sub routine becomes the beginning of the next/cannot be split into parts/sub-routines easily;

• (low organisation) serial/easily split into sub-routines/made up of separate discrete elements.

**Q5** The learning of movement skills is divided into phases. Identify the initial stage of learning. Using practical examples, describe the phase. **(3 marks)**

**3marks - 1marks max for each phase. Descriptive point must be accompanied by a suitable practical example.**

1. **Coqnitive phase** Do not accept beginner / novice / first

2. Demonstration **e.g.** ............

3. Leads to a mental picture (being formed) / Mental Rehearsal / understanding what needs to be done **e.g.** ............

4. trial and error / lots of mistakes **e.g.** ......................

5. Movement (often) lacks fluency or rhythm / movement jerky **e.g.** ...................

6. Needs conscious thought on technique **e.g.** .......... Accept ...on skill/movt

7. Unable to use intrinsic feedback / only extrinsic feedback effective **e.g.** ..............

**Q6** Practice conditions may need to be different for each activity or skill.

(i) What is variability of practice? [2 marks]

(ii) Describe massed practice. (2 marks)

(iii) Give the advantages of using distributed practice with a sports performer. (2 marks)

1 Changing the practice conditions to incorporate as many different situations as possible/a method of extending schema by changing the practice conditions/extending the motor programmes in the long term memory through different practice conditions/allowing for open skills to be practised.

2 Repeated/continuous attempts at a skill

3 With few or no rest periods

4 Allows for rest periods/avoid overload

5 Mental practice/rehearsal can occur during the breaks

6 Each practice session can be varied

7 Feedback/knowledge of results/knowledge of performance can be given in breaks

8 Maintains motivation/concentration/helps prevent inhibition/prevents boredom/tedium

9 Allows for the development of wider schema/ additional skills

10 Helps the development of positive transfer

11 Allows for progression/increasingly demanding

12 More effective than ‘massed’ practice

[**6 Marks**]

1. Cognitive theories of learning related to the work of the Gestaltists explain how we learn movement skills. Describe some of the key terms of cognitive theories of learning from Fig. 4 below**. (4 marks)**

**(accept first four points only)***1.* (Intervening variables) the mental process or thoughts occurring between receiving stimulus and giving a response   
2. (Insight Learning) using memory to solve a problem/understanding how to solve the problem   
3. (Perception) interpretation of information on offer   
4. (Past experiences) past actions/schemes/motor programmes can be used to help in the present situation   
5. (Whole learning) the skill is seen as a whole not in parts/skill is learnt as a whole movement

**(4marks)**

[**4 Marks**]