



SUBJECT:	Physical Education
DATE:	6 th September 2018
TIME:	4:00 p.m. to 6:05 p.m.

This examination paper has **FOUR** sections. Answer **ALL** sections. Follow instructions given in each section. This paper is marked out of 80 marks.

Section A: Rules, Tactics and Techniques:

You will be shown a total of **FIVE** short clips in the following order:

- ✓ 2 clips on Rules
- ✓ 1 clip on Technique
- ✓ 2 clips on Tactics

The clips are taken from the Rugby Union Division One league games between FALCONS (in yellow) and STOMPERS (in red)

Step 1: Read through all the questions.

Step 2: The first clip on rules is played. The same clip is replayed immediately after.

Step 3: One minute is given to answer the question between clips.

Step 4: On a signal, the second clip is played, and re played. The other clips will follow the same pattern.

Step 5: One minute is given to answer each clip. The same procedure is used throughout Tactics and Techniques. After the clips are all played, and the answering time is over, all the clips are replayed one last time. Candidates are given a final four minute period to make changes and finalise answers.

Section B: Anatomy & Physiology – Answer ALL questions.

Section C: Acquiring Movement Skills – Answer ALL questions.

Section D: Socio-Cultural Studies – Answer TWO out of three questions.

SECTION A: RULES, TACTICS AND TECHNIQUES

Answer ALL the questions. This section carries 10 marks.

Rules

1. In this action, player number 22 of Falcons (yellows) performs a quickly taken line out. State why this is allowed? (2)
2. In this action, Stompers (red) are in possession of the ball. The player was tackled and the referee changed the ball possession. Explain why. (2)

Technique

3. The teams are forming a scrum. Describe **TWO** technical components needed to perform this technique well. (2)

Tactics

4. What tactic was used by the Falcons' player who gave the first pass which led to a try? (2)
5. a. Stompers (red team) are awarded a penalty. Player number 9 chooses to kick the ball out to touch. Why did he do that? (1)
b. What other options were available? (1)

(Total: 10 marks)

SECTION B: ANATOMY & PHYSIOLOGY

Answer ALL the questions. This section carries 35 marks.

1. a. Synovial joints allow a wide range of movement. For each of the following, give **ONE** example to describe how such movement can be seen in the human body.
 - i) Flexion; (1)
 - ii) Adduction; (1)
 - iii) Supination; (1)
 - iv) Dorsiflexion; (1)
 - v) Circumduction. (1)
- b. Carol has been engaging in regular physical activity for the past two years. One of the benefits of her exercise programme is improved overall flexibility, this enables a greater range of movement at the joints.
 - i) Mention **TWO** other benefits of regular physical activity on Carol's muscular system. (2)
 - ii) Mention **TWO** other benefits of regular physical activity on Carol's skeletal system. (2)
- c. An exercise programme can also cause long-term injury to Carol if done incorrectly.
 - i) What is Growth Plate Disorder? (2)
 - ii) Mention **THREE** things that need to be avoided in order to reduce the risk of developing Growth Plate Disorder. (1)

2. a. During exercise, muscles need more oxygen than when at rest. Heart rate increases to make sure that enough oxygen is delivered to working muscles.
- Define submaximal exercise. (1)
 - What is the relationship between oxygen supply and oxygen demand when heart rate is at a plateau and steady state is achieved? (1)
 - A trained athlete might have cardiac hypertrophy. Explain what cardiac hypertrophy is and mention another characteristic of cardiac hypertrophy. (2)
 - What does cardiac hypertrophy lead to when at rest? (1)
- b. Muscles needing more oxygen during exercise also make use of various mechanisms. What happens in blood vessels experiencing vasomotor tone? (3)
- c. A human being produces carbon dioxide, and this waste product needs to be transported in various ways. Only about 20% combines with haemoglobin to form carbaminohaemoglobin. Mention **TWO** other ways in which carbon dioxide is transported. (2)
- d. How does a good cool-down after exercise prevent blood pooling? (2)
3. a. A person's breathing rate is typically increased during exercise. Various receptors help control the amount and rate of breathing. Proprioceptors, mechanoreceptors and baroreceptors are receptors that help identify if the rate of breathing needs to be changed.
- Mention **TWO** other receptors that help with the control of breathing. (1)
 - Explain the role of these **TWO** receptors mentioned in (i). (2)
 - What is the role of mechanoreceptors? (1)
 - Explain what the Hering-Breuer reflex is. (2)
- b. When at rest, Victor has a tidal volume of 450ml and he breathes 16 times every minute.
- Give a brief explanation of tidal volume. (1)
 - Explain what dead space is. (1)
 - Define minute ventilation and calculate Victor's minute ventilation. (2)
 - Do tidal volume and minute ventilation increase, decrease, or remain the same once Victor starts doing vigorous exercise? (1)

(Total: 35 marks)

SECTION C: ACQUIRING MOVEMENT SKILLS

Answer ALL questions. This section carries 20 marks.

- Jessica is a right-handed handball player. She is trying to improve her left hand throwing skills. What type of transfer must Jessica attempt? (1)
- Daniel is a keen beginner. He is attempting the handstand.
 - Give **ONE** example of a Gross Motor Ability required to perform this skill. (1)
 - Mention **ONE** reason why Daniel is motivated, indicating whether this is an intrinsic or extrinsic form of motivation. (2)
 - Define 'observational learning'. (1)
 - What can Daniel do to benefit from this theory? (1)

Please turn the page.

3. a. Within a sports performance setting, arousal can be somatic or cognitive. Give a practical example for both. (2)
 - b. Explain briefly the Inverted U Hypothesis. Include a graph sketch of performance levels vs arousal levels, indicating the optimum level of arousal for maximum performance. (4)
 - c. Socialisation in a sport setting can increase physical activity participation. List **TWO** benefits of this socialisation process. (2)
4. Using a specific sport example, explain how guidance and feedback varies as the learner goes through the three stages of motor skill learning. (6)

(Total: 20 marks)

SECTION D: SOCIO-CULTURAL STUDIES

Answer TWO questions. Each question carries 7.5 marks. This section carries 15 marks.

1. International federations conform with the ideals of the Olympic Movement.
 - a. What is the Olympic Movement? (1.5)
 - b. Mention **ONE** mission or role of international federations. (1)
 - c. Give **ONE** example of an international federation of an indicated sport of choice. (1)
 - d. National federations and associations are regulated by which governing body in Malta? (1)
 - e. Why is it important for a national federation to support the World Anti Doping Code? (3)
2. Physical activity and leisure spans across all ages and all sports.
 - a. Give **ONE** reason why swimming is an ideal form of exercise for senior citizens. (1)
 - b. Mention **ONE** swimming initiative or programme that is being promoted in Malta with senior citizens. (1)
 - c. Being able to swim increases the amount of aquatic sports one might practice. Apart from swimming mention **TWO** other sports that are affiliated with ASA. (2)
 - d. The popularity of football in Malta has contributed to the construction of several football pitches in various localities. How have other sports benefitted from the building of such pitches? (2.5)
 - e. With reference to children participating in football, why is it important that adult players respect the decisions of the referee? (1)
3. MOC and SportsMalta promote elite sport in various ways through various schemes.
 - a. Mention **ONE** scheme targeting elite sport. (1)
 - b. Apart from the existing schemes, suggest another way talented young sportspeople can be supported to achieve elite standard. (2)
 - c. Mention **ONE** important date in the history of the MOC and indicate what occurred. (1)
 - d. What is the Olympic Charter? (1.5)
 - e. Why is Olympic education important? (2)

(Total: 15 marks)