



SUBJECT:	Physical Education
DATE:	5 th September 2019
TIME:	4:00 p.m. to 6:35 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 Maltese Premier League 2016.

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 replayed. The other clips will follow the same pattern.

Step 5: One minute is given to answer each clip. The same procedure is used throughout Techniques and Tactics. 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, the Birkirkara FC goalkeeper (in white) tackles the opposing Pembroke player (in blue).
 - a. What is the violation in this action? (1)
 - b. Briefly describe the consequence of this tackle. (1)
2. In this action, Balzan player (in blue) tries heading the ball in the net, but the goal is disallowed.
 - a. Which rule is violated? (1)
 - b. Briefly describe this rule. (1)

Technique

3. Hibernians FC (in white) are awarded a freekick. Describe the technical components observed in the freekick. (2)

Tactics

4. What tactic/s was/were used by Pembroke FC (in red), by making four passes and succeeding in getting into the penalty area with a clear opportunity to score? (2)
5. Valletta FC (in white) managed to gain ball possession. Describe the tactic they used in this attacking action. (2)

(Total: 10 marks)

SECTION B: ANATOMY & PHYSIOLOGY

Answer ALL the questions. This section carries 35 marks.

1. a. Skeletal muscles have many functions within the body, helping with support and posture.
 - i) Explain what muscle tone is and how it helps support and posture.
 - ii) Mention **ONE** other function of skeletal muscle. (3)
- b. Luke is an elite 100m sprinter and relies on fast-twitch glycolytic muscle fibres for his main event.
 - i) Give the reason why fast-twitch glycolytic fibre is needed in sprinting.
 - ii) What is the main difference between fast-twitch glycolytic fibre and fast oxidative glycolytic fibre? (4)
- c. A number of factors affect stability and balance. In judo, stability and balance are very important. Describe **TWO** ways in which a judoka tries to maximise stability. (2)
- d. Kay is a swimmer who specialises in front-crawl. Analysis of her movement while swimming helps us conclude that she is performing general motion.
 - i) Define general motion.
 - ii) Explain how in front-crawl, general motion is performed. (3)

2. a. The cardiac cycle has a diastole phase and a systole phase. In the first stage of the cardiac cycle, the upper chambers of the heart are filled with blood.
- What is the first stage of the cardiac cycle called?
 - Where does the blood filling the upper chambers come from?
 - Name the second stage of the cardiac cycle.
 - Describe what happens in the second stage of the cardiac cycle.
 - What is the name of the final stage of the cardiac cycle?
 - Explain what happens in the final stage of the cardiac cycle. (8)
- b. A good warm-up and a good cool-down are both recommended when people engage in exercise. These have many benefits on the vascular system.
- A good warm-up improves oxygen delivery. How does this happen?
 - How does a good warm-up also reduce blood viscosity?
 - A good cool-down helps us remove fatiguing by-products like carbon dioxide and lactic acid. How does this happen?
 - How does a good cool-down prevent blood pooling? (4)
3. a. At high altitude, the movement of oxygen from arterial blood into the body's muscles is reduced. Explain what causes this. (4)
- b. Asthma is a common respiratory complication resulting in shortness of breath. However, people suffering from asthma can still engage in sport and physical activity.
- How does asthma cause shortness of breath?
 - Mention the **TWO** main types of asthma medication.
 - Why are these **TWO** medications used? (5)
- c. Regular training results in an overall improvement to the respiratory system. There are four main factors that improve with training. Mention **TWO** of these factors. (2)

(Total: 35 marks)

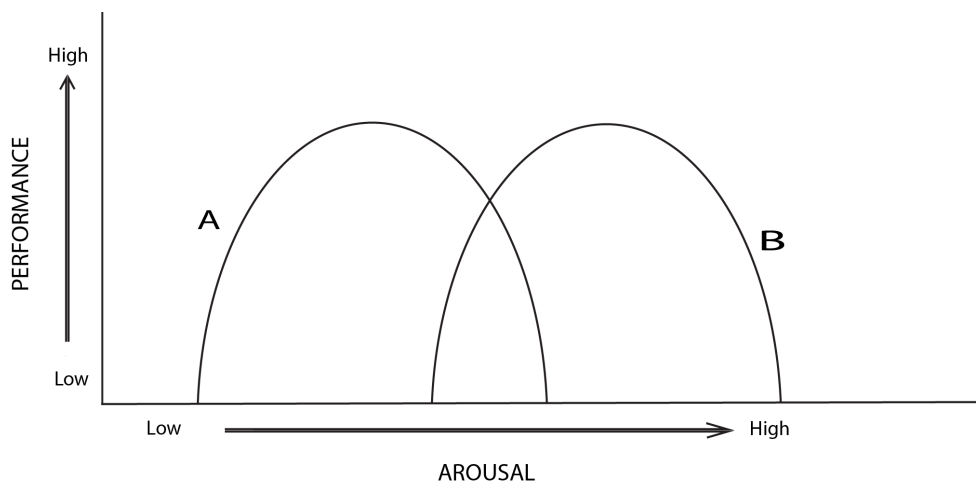
SECTION C: ACQUIRING MOVEMENT SKILLS

Answer ALL questions. This section carries 20 marks.

1. Evaluate and justify where long-distance running lies on the following skills continuum:
- gross/fine;
 - closed/open;
 - discrete/serial/continuous;
 - simple/complex. (4)
2. John is a 30 year old who just stopped playing basketball and started playing rugby union.
- Identify **ONE** positive and **ONE** negative element of transfer of learning that may exist from playing basketball to rugby union. (2)
 - List **TWO** ways a coach may improve an athlete's response time. (2)
 - Mention **ONE** non-modifiable factor which affects response time in an athlete. (1)
 - Identify **ONE** different environmental playing condition of rugby union in comparison to basketball which may affect performance. (1)

Please turn the page.

3. Below is a graph of *Performance Levels vs Arousal Levels* for two gymnasts (labelled *A* and *B*) when performing a short routine. Maria has been training for six years. Sara is a beginner who finds simple skills rather challenging.
- Describe the Yerkes-Dodson Law (inverted U hypothesis). (2)
 - State which line best represents Sara and which one best represents Maria. Justify your answer. (4)
 - Mention **TWO** motivational strategies that may be implemented to promote young athletes to stay active in sport. (2)
 - How can an athlete ensure that important information remains part of Long Term Memory? (2)



(Total: 20 marks)

SECTION D: SOCIO-CULTURAL STUDIES

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

- One of the aims of GSSE is to promote the Olympic Movement.
 - Explain the goal of the Olympic Movement. (2)
 - What is the aim of the MOC Elite Scheme? (1)
 - Why are the GSSE important for low populated states? (2)
 - Why does doping go against the concept of sportsmanship? (2.5)
- Huizinga identified the following characteristics of sport:
 - Dexterity;
 - Strategy;
 - Chance;
 - Exultation;
 Define these terms using practical examples from the game of football. (4)
 - Give **ONE** advantage and **ONE** disadvantage of competitive sport in children. (2)
 - Give **THREE** examples of Outdoor Education Activities. (1.5)
- SportMalta offers various foundation programmes targeting 4–6 year olds.
 - Why is it important to promote foundation programmes? (2.5)
 - How does this link to SportMalta's mission statement? (2)
 - Give an example of a SportMalta programme or scheme which targets physical activity in the elderly. (1)
 - Mention **TWO** challenges the elderly face in participating in physical activity. (2)

(Total: 15 marks)