
SUBJECT:	Physical Education
DATE:	4 th May 2018
TIME:	9:00 a.m. to 11:35 a.m.

This examination paper has **FOUR** sections. Answer **ALL** sections. Follow instructions given in each section.

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, teams are in a scrum. The ball is kicked upfield by the defender. Name **TWO** advantages of kicking the ball upfield. (2)
2. In this action, Stompers kick the ball out. Describe how the game resumes. (2)

Technique

3. The Falcons are in possession of the ball. The player performs a drop kick. Describe **TWO** technical components which are necessary to perform this kick. (2)

Tactics

4. Falcons are in possession of the ball. They score a try. Give **ONE** reason to explain why it is important to score a try close to the posts. (2)
5. The Stompers have possession after the scrum. Describe the tactic they are using to move the ball upfield. (2)

(Total: 10 marks)

SECTION B: ANATOMY & PHYSIOLOGY

Answer ALL the questions. This section carries 35 marks.

1. a. When two or more bones meet, a joint or articulation exists. Joints are also classified according to the degree of movement they allow.
 - i) What degree of movement is allowed at cartilaginous joints? (1)
 - ii) What connective tissue is present in cartilaginous joints? (1)
 - iii) What are sutures and where are they found? (2)
 - iv) What provides lubrication in synovial joints? (1)
- b. Kyle is preparing to shoot a football. He therefore performs flexion of the leg.
 - i) What is the name of the major muscle/group acting as the antagonist in this movement? (1)
 - ii) What is the name of the major muscle/group acting as the agonist in this movement? (1)
 - iii) What is the function of fixator muscles? (2)
- c. Regular physical activity can result in various benefits to the overall health of a human being. One of the benefits is increased bone density.
 - i) Explain how regular exercise strengthens skeletal tissue. (2)
 - ii) What skeletal disorder can be avoided later on in life by having increased bone density? (1)

2. a. The autonomic nervous system determines the rate at which a human heart beats. The autonomic nervous system is also subdivided into two systems.
 - i) Mention the **TWO** systems that make up the autonomic nervous system. (1)
 - ii) Explain how **ONE** of these systems carries out its function of increasing the heart rate. (4)
- b. Sharon is a trained athlete and her stroke volume is higher than that of an average person.
 - i) How would you explain to Sharon what stroke volume is? (1)
 - ii) Mention and briefly explain the **THREE** factors that determine stroke volume. (3)
- c. Training brings about changes in blood viscosity.
 - i) Explain what changes are brought about with training as regards to total blood volume, number of red blood cells, and plasma. (2)
 - ii) How do the relationship of these affect blood viscosity? (1)
3. a. During inspiration, air moves into the lungs.
 - i) Which **TWO** main respiratory muscles contract during inspiration when at rest? (2)
 - ii) During exercise, other muscles help increase the thoracic cavity further. Mention **TWO** of these muscles. (2)
 - iii) What are the **TWO** major functions of pulmonary diffusion? (1)
- b. Oxygen is transported by the blood around the body. However, this oxygen needs to enter muscle cells. Describe how oxygen in the blood enters muscle cells before it attaches to myoglobin. (6)

(Total: 35 marks)

SECTION C: ACQUIRING MOVEMENT SKILLS

Answer ALL questions. This section carries 20 marks.

1. Maria who is an experienced hockey player has just been awarded a penalty hit during a game.
 - a. Refer to the classification systems to discuss how the penalty stroke varies along the self paced/ externally paced and discrete/ serial/ continuous continuum. (4)
 - b. Give **ONE** example by showing where psychomotor ability is required in the penalty stroke. (2)
 - c. Which stage from the three stages of motor skill learning is Maria in? (1)
 - d. Why is a massed practice style more suitable for Maria when training the penalty stroke? (1)
 - e. Give **ONE** example of when the massed practice is better than other styles. (1)
 - f. After the penalty stroke is taken, Maria is able to give kinaesthetic feedback. Define this kind of feedback. (1)
2. a. What is the psychological refractory period? (1)
- b. What strategies can the ball carrier take in a 3 v 1 possession invasion game situation to deceive the opponent? (2)
3. Using practical examples, explain the terms 'exteroreceptors', 'proprioceptors' and 'interoreceptors'. (3)
4. Mention **ONE** characteristics of a skillful performance. (1)
5. Give **ONE** sport-specific example of how a complex skill might be taught in a simpler way. (3)

(Total: 20 marks)

SECTION D: SOCIO-CULTURAL STUDIES

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

1. a. What is outdoor education? (1.5)
b. Give **ONE** example of an outdoor recreation activity. (1)
c. Mention **TWO** personal qualities which may be enhanced by participating in outdoor recreation activities. (2)
d. Why is it important to promote outdoor education in a Maltese context? (2)
Mention **ONE** possible barrier to young people's participation in outdoor recreation activities. (1)

2. Malta is participating in the Commonwealth Games in 2018.
a. Where are these games being held? (1)
b. What is the main characteristic of the countries that participate in the Commonwealth Games? (1)
c. Evaluate the impact of athletes caught doping on the Olympic values in young children. (5.5)

3. a. What is the difference between physical education and sport? (1.5)
b. Give **ONE** example of a scheme or programme which exists in Malta to promote:
i. excellence; (1)
ii. mass participation. (1)
c. Give **TWO** reasons for and **TWO** reasons against excellence and mass participation. (4)

(Total: 15 marks)