



SUBJECT:	Physical Education
DATE:	5 th May 2023
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.

Section A: Rules, Tactics and Techniques:

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

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

The clips are taken from FIBA European Championship for Small Nations 2022, Malta vs Andorra.

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.

Please turn the page.

Section A: RULES, TACTICS AND TECHNIQUES

Answer ALL the questions. This section carries 10 marks.

Rules

1. In this action, a violation takes place as the Player No. 14 of the Malta National Team (in red) is trying to score.
 - a. What is the violation? (1)
 - b. How will the game resume? (1)
2. The Andorra National Team (in white) are on offence. During this action the Andorra player is fouled whilst going for a lay-up shot.
 - a. Will the two points be awarded to the fouled player? (1)
 - b. What will be the action following this? (1)

Techniques

3. Malta's National Team player No. 14 is awarded two free throws. Describe **TWO** technical components of taking a free throw. (2)
4. Player No. 15 of the Malta National Team (in red) scored. Describe **TWO** technical components used by No. 15 which allowed him to score. (2)

Tactics

5. In this action, the Andorra National Team (in white) scored. Describe the tactic applied during this action which allowed the Andorra player to take a close-range shot. (2)

(Total: 10 marks)

SECTION B: ANATOMY AND PHYSIOLOGY

Answer All the questions. This section carries 35 marks.

6. a. The skeletal system can be divided into two distinct categories of bones: the axial and the appendicular skeleton.
 - i) Explain what is the appendicular skeleton and give **ONE** example of a bone that is part of the appendicular skeleton. (2)
 - ii) Explain what is the axial skeleton and give **ONE** example of what makes up the axial skeleton. (2)
- b. Tony has paid a gym membership for the first time. He is inexperienced and not used to weight training. After the first session Tony experienced DOMS.
 - i) What does DOMS stand for? (1)
 - ii) What did Tony feel when experiencing DOMS? (1)
 - iii) What has happened inside the body to cause this feeling? (1)
 - iv) What should Tony include in his training sessions to reduce the effects of DOMS? (1)

- c. Carlo is a 75 year old man who suffers from Osteoarthritis. Every time his grandchildren see him in pain, he tells them to be physically active.
- i) What causes the pain in Osteoarthritis? (1)
 - ii) What kind of exercise would you suggest to Carlo, in order to help control the pain? (2)
 - iii) Why does Carlo tell his grandchildren to be physically active? (1)
7. a. The heart is myogenic and it is the conduction system of the heart that spreads the impulses throughout the heart.
- i) What does myogenic mean? (2)
 - ii) Name the mass of cardiac muscle cells where the electrical impulses begin. (2)
 - iii) Name the specialised mass of muscle cells that distribute the action potential to the Bundle of His. (1)
- b. The performance of the heart is dependent on Stroke Volume and Heart Rate.
- i) Define Stroke Volume. (½)
 - ii) Briefly explain Cardiac Output. (½)
 - iii) During exercise, Stroke Volume increases for **TWO** reasons. Give a detailed explanation of why this happens. (4)
 - iv) Describe what is blood viscosity, in terms of red blood cell and plasma volumes. (2)
8. a. Respiration rates are influenced by a number of factors, especially during exercise. For example, the respiratory centre has a chemosensitive area. If chemoreceptors determine that the blood acidity has increased, the respiratory centre sends nerve impulses to increase the rate of ventilation.
- i) Mention **TWO** locations where chemoreceptors can be found. (2)
 - ii) The concentration of which chemical increases in the blood for the latter to become more acidic? (½)
 - iii) Explain the Hering-Breuer Reflex. (2½)
 - iv) Apart from chemoreceptors and baroreceptors, mention and explain the function of another **TWO** receptors that influence and control breathing rates. (2)
- b. Anton suffers from asthma, which is a common respiratory complication. Asthma usually causes shortness of breath and restriction to ventilation.
- i) Mention **TWO** things happening inside the body to cause shortness of breath and restriction to ventilation due to asthma. (2)
 - ii) Give Anton **TWO** exercise tips in order for him to benefit from physical activity while still being safe. (1)
 - iii) Mention **ONE** type of asthma medication that helps prevent asthma attacks. (1)

(Total: 35 marks)

Please turn the page.

SECTION C: ACQUIRING MOVEMENT SKILLS**Answer ALL questions. This section carries 20 marks.**

9. Amy is a young athlete who started training basketball.
- Explain why a distributed practice method is appropriate for beginner basketball players. (2)
 - Mention **ONE** open skill used in basketball. (1)
 - Explain why a variable practice method is appropriate for open skills training. (2)
 - Explain why positive reinforcement is important, particularly in the first stages of learning. (2)
 - Using any sporting example, give **ONE** strategy that can be implemented to improve retention and retrieval of memory. (2)
 - Explain why maintenance of practice is important in the third phase of learning. (2)
10. Explain discrete skills, using **ONE** practical example from football. (3)
11. Compare the Cognitive Learning Theory with the Cognitive Stage of Learning. (6)

(Total: 20 marks)**SECTION D: SOCIO-CULTURAL STUDIES****Answer TWO questions. Each question carries 7.5 marks. This section carries 15 marks.**

12. Outdoor activities can have an educational or a recreational dimension.
- In the context of outdoor activities, define the terms educational and recreational, giving **ONE** practical example for **each** term. (3)
 - Mention **ONE** benefit of participating in outdoor activities. (1)
 - Mention **ONE** barrier which restricts PE Departments from offering a regular varied Outdoor Education programme to young people. (1)
 - Explain how schools can adapt to still provide Outdoor Education. (2½)
13. Malta is hosting the Games of the Small States of Europe in 2023.
- Which organization is responsible for choosing the athletes who will participate in the Games to represent Malta? (1)
 - Discuss **TWO** advantages and **TWO** disadvantages of Malta being the host nation. (4)
 - Mention **THREE** sports which are affiliated to the ASA. (1½)
 - Mention **ONE** benefit for athletes, related to the ASA organising Time Trials for all age-groups every month. (1)
14. The Three Core values of Olympism are Excellence, Respect and Friendship.
- Give **ONE** practical example for **each** and explain why the three mentioned values are important to Olympism. (3)
 - Mention **ONE** role the IFs have within the Olympic Movement. (1)
 - Briefly explain the Elite Scheme of the MOC. (1½)
 - Explain why it is important to have an Olympic Charter. (2)

(Total: 15 marks)