

## MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

#### INTERMEDIATE MATRICULATION LEVEL 2022 FIRST SESSION

SUBJECT: Physical Education

DATE: 6<sup>th</sup> May 2022

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

The clips are taken from the Maltese Premier League 2019.

- 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. Hamrun FC (in red) are trying to put pressure on Valletta FC (in white) by passing and trying to find an open space. During this action Valletta's FC player (in white) was hit by Hamrun FC player.
  - a. Which rule is violated here? (1)
  - b. Briefly describe this rule. (1)
- 2. In this action, Valletta's player (in white) is reprimanded by match official for two different offences.
  - a. Which rule is violated on his first offence when he was shown the yellow card? (1)
  - b. Briefly describe the second violation after being shown the yellow card on his first offence.

(1)

## **Techniques**

3. A Valletta FC player (in white) managed to score. Mention **TWO** skill-related qualities he applied to score. (2)

#### **Tactics**

- 4. Valletta FC (in white) are in possession of the ball. Describe the tactic they are using to move the ball upfield. (2)
- 5. Hamrun FC (in red) managed to score during the injury/added time.
  - a. Describe their tactic. (1)
  - b. Give a reason why it is important to revert to this tactic at that stage. (1)

(Total: 10 marks)

## **SECTION B: ANATOMY AND PHYSIOLOGY**

## Answer All the questions. This section carries 35 marks.

- 6. a. Joints are very important for human movement. For example, while playing football, Raymond makes different movements at the hip joint. Raymond performs lateral rotation when he gives a side pass and extension at the hip when preparing to shoot.
  - i) Mention **TWO** muscles used when lateral rotation at the hip occurs. (2)
  - ii) Mention **TWO** muscles used when extension at the hip occurs. (2)
  - b. Explain the following terms with reference to biceps curls:
    - i) Isotonic Concentric Contraction; and (2)
    - ii) Isotonic Eccentric Contraction (2)

	cout to tackle the ball carrier in rugby.  Compare and contrast the triple jump <b>AND</b> the rugby tackle on:  i) the open/closed continuum, and on;  ii) the discrete/serial/continuous continuum.  Give <b>ONE</b> reason why the triple jump is a complex skill.	(2) (2) (1)
swe	er ALL questions. This section carries 20 marks.	rv is
	(Total: 35 mai	rks)
	ii) Give <b>ONE</b> reason why carbon dioxide transfers more rapidly than oxygen.	(3) (1)
C.	the blood. i) Explain how the diffusion gradient enables oxygen to move from the alveoli into	the
	<ul> <li>ii) Mention <b>TWO</b> ways in which the carbon monoxide found in cigarette smoke aff oxygen transportation in the blood.</li> </ul>	(2)
b.	to perform physical activity.	
a.	<ul><li>i) What is the tidal volume for Nicholas?</li><li>ii) Calculate the minute ventilation.</li></ul>	(1) (2)
3	ii) Why are the ventricles of the heart more muscular?	(1) (2)
c.	Ivan is an elite athlete who has cardiac hypertrophy.	(1)
	hypertension. i) What causes atherosclerosis? ii) What is the impact of atherosclerosis on the arterial walls?	(1) (2)
h	ii) Name and briefly explain what happens in the second stage of the cardiac cycle. (iii) Name and briefly explain what happens in the final stage of the cardiac cycle. (	2½) 2½)
a.	cardiac cycle, the upper chambers of the heart are filled with blood.	the (1)
C.	Bone is composed of around 35% organic tissue such as collagen.  i) What is collagen?  ii) What does collagen provide to the bone?  iii) Why is the characteristic mentioned in c(ii) important?	(1) (1) (2)
	a. b. c. Thiaba. b. c.	<ul> <li>i) What is collagen?</li> <li>ii) What does collagen provide to the bone?</li> <li>iii) Why is the characteristic mentioned in c(ii) important?</li> <li>a. The cardiac cycle has a diastole phase and a systole phase. In the first stage of cardiac cycle, the upper chambers of the heart are filled with blood.</li> <li>i) What is the first stage of the cardiac cycle called?</li> <li>ii) Name and briefly explain what happens in the second stage of the cardiac cycle. (iii) Name and briefly explain what happens in the final stage of the cardiac cycle. (iii) Name and briefly explain what happens in the final stage of the cardiac cycle. (b. The cardiovascular system can face a number of diseases such as atherosclerosis hypertension.</li> <li>i) What causes atherosclerosis?</li> <li>ii) What is the impact of atherosclerosis on the arterial walls?</li> <li>c. Ivan is an elite athlete who has cardiac hypertrophy.</li> <li>i) Define cardiac hypertrophy.</li> <li>ii) Why are the ventricles of the heart more muscular?</li> <li>a. During exercise Nicholas breathes 30 times per minute and inhales 1000ml per brea i) What is the tidal volume for Nicholas?</li> <li>ii) Calculate the minute ventilation.</li> <li>b. Smoking is unhealthy. As a smoker Steve gets out of breath quickly and finds it diff to perform physical activity.</li> <li>ii) Mention TWO ways how the tar found in cigarettes can cause harm.</li> <li>iii) Mention TWO ways how the found in cigarettes can cause harm.</li> <li>iii) Mention TWO ways in which the carbon monoxide found in cigarette smoke aff oxygen transportation in the blood.</li> <li>c. Oxygen and carbon dioxide are continuously being transferred between the lungs the blood.</li> <li>ii) Explain how the diffusion gradient enables oxygen to move from the alveoli into blood.</li> <li>ii) Give ONE reason why carbon dioxide transfers more rapidly than oxygen.</li> <li>(Total: 35 mai</li> <li>CTION C: ACQUIRING MOVEMENT SKILLS</li> <li>Swer ALL questions. This section carries 20 marks.</li> <li>This qu</li></ul>

Please turn the page.

(1)

(6)

Explain the THREE stages of motor skill learning, using the rugby tackle as a sporting

e. Suggest **ONE** way the ball carrier can deceive Mary prior to the tackle.

example for **each** stage.

10. Explain the difference between simple reaction time and choice reaction time using **ONE** sporting example for **each** reaction time. (4)

(Total: 20 marks)

## **SECTION D: SOCIO-CULTURAL STUDIES**

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

- 11. Mary is a national team swimmer. Her speciality is the 50m freestyle. Her goal is to participate in the Summer Olympic Games to be held in 2024. She is also on the MOC Elite Athlete Scheme.
  - a. Mention the **FOUR** main sports promoted by the Aquatic Sports Association of Malta. (2)
  - b. Mention **ONE** benefit Mary is entitled to as a member of the MOC Elite Scheme. (½)
  - c. Explain the difference between 'physical activity' and 'sport' using swimming as a practical example. (3)
  - d. SportMalta's Active Elderly Programme includes swimming. Mention **TWO** benefits of physical activity for the elderly. (2)
- 12. The history of football in Malta.
  - a. The game of football was formally introduced in Malta by the British troops who were stationed on the island. Briefly explain how football in Malta benefitted from colonial infrastructure following the British departure from Malta in 1979. (2)
  - b. The Malta Football Association joined UEFA in 1960.
    - i) State what the acronym UEFA stands for. (½)
    - ii) Mention **ONE** way Malta benefitted from joining UEFA. (2)
  - c. The FA Trophy was awarded to Malta in 1933 in gratitude for the support showed by Maltese fans during a football game. Mention the **TWO** countries who played this game.
  - d. Explain why it is important that the MFA organises courses for referees, coaches and administrators on a regular basis. (2)
- 13. The symbol of the Olympics Rings expresses the Olympic Movement. The Olympic Values Education Programme (OVEP) is based on the Olympic philosophy that learning takes place through the balanced development of body and mind.
  - a. Briefly explain the Olympic Movement. (2)
  - b. Mention the **TWO** meanings of the Olympics Rings.
  - c. Mention **ONE** way how schools can promote the Olympic Philosophy. (1)
  - d. Name the Maltese entity that has exclusive authority to represent Malta at the Olympic Games. (1)
  - e. Briefly explain how doping goes against the Olympic Spirit. (2½)

(Total: 15 marks)

(1)