

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
SEPTEMBER 2017

SUBJECT:	PHYSICAL EDUCATION
DATE:	1st September 2017
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
- ✓ 2 clips on Tactics
- ✓ 1 clip on Technique

The clips are taken from a women's handball game from the Handball National League. The teams competing are La Salle Handball Club, playing in red against Kavallieri Handball Club who are playing in black.

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 4 minute period to make changes and finalise answers.

Section B: Answer ALL questions.

Section C: Answer ALL questions.

Section D: 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, Kavallieri are attacking. Player no. 15 of Kavallieri scores. After the goal, the official shows a yellow card to no.3 of De La Salle.
 - a. Why was this call made? (1)
 - b. Why was this call not made before the shot was taken? (1)
2. In this action, Kavallieri are on offence. No. 5 of Kavallieri receives the ball.
 - a. What was the violation made by player no. 5 of Kavallieri? (1)
 - b. Describe this rule. (1)

Tactics

3. In this action, De La Salle team gain possession of the ball and go on offence. Describe the tactic the team is using. (2)
4. This action shows De La Salle on defence whilst Kavallieri are on offence. Describe the defence De La Salle are using in this action. (2)

Technique

5. In this action, Kavallieri are in possession of the ball. Player no 23 of Kavallieri successfully passes the ball to her team mate no.3 who goes for a shot.
 - a. What is the type of pass used by player no.23? (1)
 - b. Name **ONE** advantage of using this kind of pass. (1)

(Total: 10 marks)

SECTION B: ANATOMY AND PHYSIOLOGY

Answer ALL questions. This section carries 35 marks.

6. a. Two of the major functions of the skeletal system are support and movement.
 - i) Mention another **TWO** functions of the skeletal system. (1)
 - ii) Which function is the axial skeleton mainly responsible for? Give a brief explanation. (2)
 - iii) Briefly explain what is meant by appendicular skeleton. (1)
- b. i) Christine is a basketball player who is executing a set shot. What type of movement happens at the elbow and at the wrist? (1)
- ii) Mention **ONE** muscle used for the movement at the elbow during the execution of the set shot. (1)
- iii) Christine has now performed a lay-up. What type of movement happens at the ankle when she is landing right after the lay-up? (1)
- iv) Mention **ONE** muscle used for the movement at the ankle upon landing. (1)
- c. John is a sprinter specialising in 100m races. He uses the blocks in order to have powerful starts to his races. Once the race starts, John continues to accelerate for the first 5 seconds.
 - i) By using the start of a 100m race as an example, explain Newton's third law of motion. (2)
 - ii) Explain how John continues to accelerate by using Newton's second law of motion. (2)

7. a. The heart is an extremely important organ in the human body. It is myogenic and uses a conduction system to spread impulses throughout the heart.
- i) Explain what is meant by myogenic. (1)
 - ii) Explain how the conduction system works. (5)
- b. Keith smokes 15 cigarettes a day. Smoking has reduced the amount of oxygen available in Keith's body, and this has a negative impact on Keith's performance in football.
- i) What chemical found in cigarette smoke is the main cause of Keith's reduced availability of oxygen? (1)
 - ii) Why does this chemical reduce the availability of oxygen in Keith's body? (2)
- c. Kate is a handball player and she believes that a good warm-up is very important at the start of every training session. She believes that a good warm-up has many positive effects on her vascular system. Mention **THREE** ways in which Kate's vascular system is prepared for exercise by a good warm-up. (3)
8. a. Lisa is a long distance runner who needs to have very good endurance performance. Such endurance performance depends on the quick and effective dissociation of oxygen from haemoglobin.
- i) There are four factors that have an effect on the dissociation of oxygen from haemoglobin. Mention these **FOUR** factors. (4)
 - ii) What happens to the partial pressure of oxygen within working muscles during exercise? Why does this happen? (2)
- b. Regular training seems to have an impact upon various aspects of the respiratory system. For example, regular training seems to result in small increases in lung volume as well as improved transport of respiratory gases.
- i) What impact does an increased lung volume have on tidal volume when at rest? (1)
 - ii) What impact does an increased lung volume have on tidal volume during exercise? (1)
 - iii) How does training affect respiratory muscles, leading to increased lung volume? (1)
 - iv) How does an increased blood plasma volume help with improved transport of respiratory gases? (1)
 - v) How does the impact of training on haemoglobin help with improved transport of respiratory gases? (1)

(Total: 35 marks)

SECTION C: ACQUIRING MOVEMENT SKILLS

Answer ALL questions. This section carries 20 marks.

9. Badminton is an indoor net game which requires various skills and particular abilities. Depending on the skill level of the players, the game can take up from 10 minutes to approximately an hour in duration.
- a. With reference to the Movement Skills Continuum, discuss how the forehand serve in badminton varies along the:
- i) Open/Closed Continuum; (2)
 - ii) Self Paced/Externally Paced; (2)
 - iii) Simple/Complex Continuum. (2)
- b. Mention **ONE** gross motor ability which is vital to the sport of Badminton, giving **TWO** specific examples of skills where such abilities are required in this sport. (2)
- c. Identify how the smash in Badminton can have a positive transfer to a skill in Tennis. Give an example of the Tennis skill. (2)

Please turn the page.

10. People differ in the rate at which they learn.
- Sketch and clearly label the learning curves of successful performance vs trials/time which show:
 - positive acceleration; (1)
 - negative acceleration (1)
 - A plateau in learning happens for various reasons. Mention **TWO** reasons. (2)
11. In learning a skill, most learners require guidance. Mention a type of guidance and give a practical example. (2)
12. Schema is a build-up of experiences which can be adapted and transferred to meet the demands of new situations. Referring to the Schema Theory, describe the Recall Schema and Recognition Schema using specific practical examples. (4)
- (Total: 20 marks)**

SECTION D: SOCIO-CULTURAL STUDIES

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

13. The SportsMalta mission statement is “Moving a nation through the promotion and development of sport for a healthy, inclusive and successful Malta.”
- Explain how and give an example of programmes or schemes organized by SportsMalta which target the terms ‘healthy’, ‘inclusive’ and ‘successful’ as per the mission statement of SportsMalta. (4.5)
 - What lifestyle does a high quality physical education experience encourage more young people to adopt? Give **TWO** examples. (2)
 - How can physical education lessons be of a high quality? (1)
14. a. Differentiate between the terms ‘physical activity’, ‘physical recreation’ and ‘sport’. (3)
- How does the above reflect the concept of olympism? (1.5)
 - The practice of sport is a human right. Mention **ONE** way in which people do **not** have access to sport. (1)
 - The IOC has many missions. What is its stand on doping? (1)
 - There are more men participating in high level sports such as the Olympics Games. Mention **TWO** barriers women have in sport. (1)
15. a. Mention a date and event in the history of the MFA which is important to the history of football in Malta. (1.5)
- Compare and contrast between MFA and ASA in the context of how various age groups are targeted to get people practising and competing in their respective sports. (4)
 - Waterpolo aims to become Malta’s National Sport. What are the barriers this sport faces to achieve this in comparison to the popularity of football? (2)
- (Total: 15 marks)**