

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
SEPTEMBER 2016

SUBJECT:	PHYSICAL EDUCATION
DATE:	31st August 2016
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: Techniques, Tactics and Rules in Team Games – Answer all the questions.

You will be shown a total of 5 short clips in the following order:

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

The clips are taken from a BOV Division One men basketball league game between VIRTUS (in White kits) and FLORIANA (in green kits).

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. 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: Anatomy and Physiology: Answer all questions

Section C: Acquiring Movement Skills: Answer all questions

Section D: Socio-Cultural Studies and the Role and the Structure of International and Local Sport Organisations: Answer two out of three questions

SECTION A: Techniques, Tactics and Rules in Team Games – Answer ALL questions.**Rules**

1. VIRTUS are on offence. A three-point shot is attempted. The shot is missed but VIRTUS player no 11 manages to get the rebound. He is fouled on the shot under the basket. The FLORIANA coach reacts to this decision and the official makes a call.
 - a. What is the official's call here? (1)
 - b. How is this call punished? (1)
2. A VIRTUS player dribbles the ball up court and attempts to go to the basket. A violation however occurs.
 - a. What is the violation called? (1)
 - b. How does the game resume? (1)

Tactics

3. VIRTUS are attacking. They manage to score a three-pointer using a specific tactic. What tactic is used to 'free' the shooter? (2)
4. FLORIANA try to bring the ball up court but are defended well by VIRTUS. The official calls an 8 second violation against them.
 - a. What defensive tactic was used by VIRTUS to win them the ball? (1)
 - b. When is it best to use this tactic? (1)

Technique

5. FLORIANA'S no. 4 player is shooting a free throw. After the shot player no. 5 of VIRTUS does not allow no. 9 of Floriana to go for the rebound. Explain the technique shown by player no. 5 of VIRTUS. (2)

SECTION B: Anatomy and Physiology: Answer ALL questions.

6. a. There are three basic types of cartilage found in the human body. Name and briefly describe the type of cartilage found in the ear. (1)
- b. There are six types of synovial joints. Mention **one** type of uniaxial joint and **one** type of biaxial joint. (2)
- c. Skeletal muscles are responsible for mechanical movement in the human body. Such muscles possess three essential properties. Name and explain these **three** properties. (3)
- d. When analysing human mechanical movement in sport, sports coaches, make reference to three types of motion. These are linear motion, angular motion, and general motion.
 - i) What is angular motion? Provide **two** examples of sport performers that undergo angular motion. (4)
 - ii) Explain how an applied force causes angular motion. (2)

7. a. What is the main role of chemoreceptors located in the aorta and carotid arteries when physical exercise begins? (1)
- b. Several mechanisms aid in the process of venous return. Pocket valves are one of these mechanisms.
- i) Briefly explain what is meant by venous return. (1)
 - ii) How do pocket valves aid venous return? (1)
 - iii) Mention and explain **one** other mechanism that aids venous return from lower body parts. (2)
- c. George visited the doctor to have his blood pressure measured. The reading of his blood pressure is 160 mmHg/100mmHg.
- i) At which artery is blood pressure usually measured? (1)
 - ii) What is the name of the instrument used to measure blood pressure? (1)
 - iii) Briefly explain the difference between systolic and diastolic pressure. (1)
 - iv) What can we conclude from George's blood pressure reading? (1)
 - v) How can this reading be linked to George's history of atherosclerosis? (3)
8. a. Expiration is the process through which air inside the lungs is released.
- i) Give a detailed explanation of how intrapulmonary pressure is increased to help with expiration when the body is at rest. (3)
 - ii) Which muscles are mainly responsible for increasing intrapulmonary pressure during exercise? (1)
- b. Oxygen combines with haemoglobin to form oxyhaemoglobin. This combination is later followed by dissociation of oxygen from haemoglobin, and endurance performance depends on this being quick and effective. Such dissociation depends on four factors. Mention these **four** factors and briefly explain their impact on what is known as the Bohr Shift. (5)
- c. Regular training can cause the respiratory system to adapt.
- i) What happens to the capillaries surrounding muscle tissues and alveoli following regular endurance training? (1)
 - ii) What does such a change improve? (1)

SECTION C: Acquiring Movement Skills – Answer ALL questions.

9. A highly experienced and talented triple jumper feels that during one of her jumps, she did not produce a powerful hop. She speaks about this with her coach who gives her feedback on the matter.
- a. Mention **one** Gross Motor Ability which is required in this activity and state why it is needed. (2)
 - b. Mention and describe **two** types of feedback that are being used in this situation. (3)
 - c. Describe the Triple Jump using the Serial/ Discrete/ Continuum. (2)
 - d. Using Arousal theories, explain why this athlete may not be able to get back to her best performance if she becomes over-aroused. (1)

Please turn the page.

10. A hockey pass and a cartwheel are different activities which need different practice methods situations.
- Mention **two** practice situations which would suit these activities and give a reason for your choices. (3)
 - Refer to the Recall Schema Theory to explain how a hockey player in a 2 v 1 Situation chooses the right option for a pass. (2)
11. Cycling requires Gross Body Equilibrium.
- Mention **one** Perceptual Motor Ability required in Cycling. (1)
 - What is the name of the Sensory receptor used during exercise which stimulates the CCC (Cardiac Control Centre)? (1)
 - Using Cycling, give **one** example of the closed loop theory. (2)
 - List the **three** Stages of Motor Learning with reference to learning how to ride a bicycle. (3)



SECTION D: Socio-cultural Studies – Answer TWO questions.

12. Team Malta participated in the European Waterpolo Championships in 2016.
- Which association is responsible for Waterpolo? (1)
 - Mention another sport which is part of this association. (1)
 - Mention **two** fundamental skills needed in Waterpolo which one has to master in order to play this game. (2)
 - Do you think Malta should invest more in Waterpolo? Give reasons for your answer. (3.5)
13. In the athlete's oath during the Olympic games, athletes promise to commit to sport without doping and drug-use.
- If an athlete breaks this oath, which Olympic value does this go against? (2)
 - Both SportMalta and MOC strive to fight against doping. State how these sporting-body organisations do this. (2)
 - Why is it important to educate young athletes about doping? (2)
 - Briefly explain the elite scheme of MOC. (1.5)
14. Long distance running can be considered both a sport and a physical recreational activity.
- Discuss the differences between these two. (4.5)
 - Mention **three** dates and events in the history of MFA which are important to the history of football in Malta. (3)