FORM 4 | PHYSICAL EDUCATION (OPTION) | TIME: 1h 30 min

Name: ___________________________ Class: _____________

<table>
<thead>
<tr>
<th>Section A</th>
<th>Section B</th>
<th>Section C</th>
<th>Section D</th>
<th>TOTAL MARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>16</td>
<td>36</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

THEORY PAPER (80%)

<table>
<thead>
<tr>
<th>40% THEOREY PAPER</th>
<th>45% PRACTICAL (CHOOSE 3)</th>
<th>15% PORTFOLIO</th>
<th>100% FINAL SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATHLETICS (15%)</td>
<td>GAMES (15%)</td>
<td>SWIMMING (15%)</td>
<td>INTERVIEW (5%)</td>
</tr>
<tr>
<td>GYM/DANCE (15%)</td>
<td></td>
<td></td>
<td>SCOUTING (5%)</td>
</tr>
<tr>
<td>SKILL ANALYSIS (5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section A – Movement and Physical Activities (16 marks).
Answer question 1 (Skill Acquisition) and choose THREE questions from 2 to 8 in Section A. Answer ALL parts of the chosen questions.

1. **Skill Acquisition**

   a  The aim of feedback is to help improve the performance of an action or skill. Mention TWO ways how a person can get feedback.
   
   i  _______________________
   
   ii  _______________________

   [1]

   b  Some skills may fall somewhere in between open and closed skills. Write the number of the following skills accordingly in the boxes below. One has been done for you.

   ![Diagram of Open Skill and Closed Skill](image)

   Putting the shot put 1
   Dribbling an opponent 2
   Taking a penalty 3

   [2]

   c  Mental rehearsal is a technique often used as part of skill acquisition. Why should mental rehearsal form part of a training session?

   ________________________________

   [1]

2. **Athletics**

   a  Mention TWO infringements for which a sprinter is disqualified from a 100m race.

   i  ________________________________

   ii  ________________________________

   [1]

   b  Give ONE teaching point of how a performer should hold the shot put.

   ________________________________

   [1]

   c  Mention TWO jumping events.

   i  ________________________________

   ii  ________________________________

   [1]

3. **Badminton**

   a  Give ONE instance when a drop shot is played in badminton.

   ________________________________

   [1]
b Which diagram shows the trajectory of a drop shot?

Write A, B or C: ________.

[Diagram with options A, B, C]

[1]

c Shade the part of the court that shows the area of play for singles.

[Grid of a badminton court with shaded area]

[1]

d What is the correct referee’s decision when a shuttle hits the top part of the net and lands in the opponent’s (receiver’s) service court?

______________________________________________________________

[1]

4. Dance

a Mention ONE relationship that can be used in a group dance.

______________________________________________________________

[1]

b ‘Tight or loose actions’ is an example of how weight can be used in a dance. Mention another contrasting example.

______________________________________________________________

[1]

c A dance routine is made up of different actions. Give:

TWO actions of the whole body (locomotor).

i ____________________________ ii ____________________________ [1]

TWO actions of body parts (non-locomotor).

i ____________________________ ii ____________________________ [1]
5. **Gymnastics**

a. The pictures below show incorrect ways how to perform a handstand. Identify **TWO** mistakes.

![Incorrect Handstand](image)

i. ____________________________________________________________________________________ [1]

ii. ____________________________________________________________________________________ [1]

b. What is the main difference between the men’s and women’s floor routine?

______________________________________________________________________________________ [1]

c. Mention **TWO** linear vaults.

i. _______________ ii. ______________________ [1]

6. **Hockey**

a. Explain what happens at the start of play of a hockey game.

______________________________________________________________________________________ [1]

b. The push pass is the most common type of pass used in the game. When is it best to use a push pass?

______________________________________________________________________________________ [1]

c. What does the first number in the 2-5-3 formation in hockey represent?

______________________________________________________________________________________ [1]

d. Mention **ONE** rule related to the skill of tackling.

______________________________________________________________________________________ [1]
7. **Swimming**
   
   **a** Name **TWO** swimming strokes besides the backstroke.
   
   i ___________________________________________________________  ii ___________________________________________________________  [1]
   
   **b** Give **TWO** teaching points for a good *arm entry action* in the backstroke.
   
   i ___________________________________________________________  [1]
   
   ii ___________________________________________________________  [1]
   
   **c** In which stroke is bilateral breathing used?
   _____________________________________________________________  [1]

8. **Volleyball**

   **a** When should teams change court sides?
   _____________________________________________________________  [1]

   **b** Mention **ONE** instance when a player uses a ‘tip’ in attack.
   _____________________________________________________________  [1]

   **c** i Look at the picture below and identify the skill being executed.
   _____________________________________________________________  [½]

   ii Is this skill *offensive* or *defensive*?
   _____________________________________________________________  [½]

   **d** When should a team rotate?
   _____________________________________________________________  [1]
Section B – Health Related Fitness [16 marks].
Answer ALL questions in this Section.
Answer ALL parts of each question.

1. Obesity and anorexia are two dietary conditions. Write the following statements near the corresponding condition.

<table>
<thead>
<tr>
<th>Skeletal and joints problems</th>
<th>Loss of muscle mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Obesity: ____________________</td>
<td>[½]</td>
</tr>
<tr>
<td>ii Anorexia: __________________</td>
<td>[½]</td>
</tr>
</tbody>
</table>

2. Give ONE reason why a person should reduce the amount of saturated fat in his/her diet.

________________________________________________________________________ [1]

3. Give ONE example of the particular food type/food that might play an important role in the diet of the athletes below.

<table>
<thead>
<tr>
<th>Weightlifter</th>
<th>Marathon runner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[2]

4. Stephen eats food which is high in protein and fat at the beginning of the week. Then two days before a competition, he eats more carbohydrates to increase muscle glycogen stores.

i What is this type of diet called?

________________________________________________________________________ [1]

ii Mention ONE sport event which can benefit from this type of diet.

________________________________________________________________________ [1]

iii Where is glycogen stored in the body?

________________________________________________________________________ [1]

5. Fill in the missing words in the table below.

<table>
<thead>
<tr>
<th>Vitamin/Mineral</th>
<th>A shortage leads to</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Iron</td>
<td></td>
</tr>
<tr>
<td>ii Rickets</td>
<td></td>
</tr>
</tbody>
</table>

[2]
6. Complete the following equations:
   a. In aerobic training.
   \[ \text{Glucose} + \underline{[\text{ }]\text{ }} = \text{Energy} + \underline{[\text{ }]\text{ }} + \underline{[\text{ }]\text{ }} \]
   b. In anaerobic training.
   \[ \underline{[\text{ }]\text{ }} + \text{No Oxygen} = \text{Energy} + \text{Lactic Acid} \quad [2] \]
   c. Mention ONE effect of a build-up of lactic acid.
   _____________________________________________________________________ [1]

7. a. Give a brief definition of ‘muscular endurance’.
   _____________________________________________________________________ [1]
   b. Mention another sport, besides cycling, that requires muscular endurance.
   _____________________________________________________________________ [1]

8. Tick (✓) to show whether the statements below refer to **aerobic** or **anaerobic** respiration.

<table>
<thead>
<tr>
<th></th>
<th>Aerobic</th>
<th>Anaerobic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>A 30 minute run at 60-80% of maximum heart rate.</td>
<td>[½]</td>
</tr>
<tr>
<td>ii</td>
<td>Working at high intensity for a short period of time.</td>
<td>[½]</td>
</tr>
<tr>
<td>iii</td>
<td>Running 10,000 meters.</td>
<td>[½]</td>
</tr>
<tr>
<td>iv</td>
<td>Low intensity exercise.</td>
<td>[½]</td>
</tr>
</tbody>
</table>

**Section C – Body Systems and Performance [36 marks].**
Answer ALL questions in this Section.
Answer ALL parts of each question.

1. a. Progression and reversibility are two principles of training. Name the other TWO principles of training.
   i. ____________________________ ii. ____________________________ [2]
b Which of the graphs below shows:

i Progression: Graph: ____________ [1]

ii Reversibility: Graph: ____________ [1]

![Graphs A, B, C]

2. Put the following parts of a training session next to the correct statement.

*Warm up Phase*   *Fitness Phase*   *Cool down Phase*   *Skill Phase*

<table>
<thead>
<tr>
<th>Training Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Physical conditioning exercises. [1]</td>
</tr>
<tr>
<td>ii Best learnt in a game like context or competitive setting. [1]</td>
</tr>
<tr>
<td>iii Prepares the body for the activity. [1]</td>
</tr>
<tr>
<td>iv It helps to remove lactic acid and slows the heart rate gradually. [1]</td>
</tr>
</tbody>
</table>

3. State whether the following statements are *internally* or *externally* caused injuries/conditions.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i Jane suffered a concussion after colliding with her opponent. [½]</td>
<td></td>
</tr>
<tr>
<td>ii Ann has been suffering from tennis elbow for a number years. [½]</td>
<td></td>
</tr>
<tr>
<td>iii David retired from the race due to dehydration. [½]</td>
<td></td>
</tr>
<tr>
<td>iv Jessica pulled her hamstring on clearing a hurdle. [½]</td>
<td></td>
</tr>
</tbody>
</table>

4. Give ONE example of a:

i Hard tissue injury: ____________________________ [1]

ii Soft tissue injury: ____________________________ [1]
5. Use the words below to match the training method with the respective sport.

<table>
<thead>
<tr>
<th>Continuous training</th>
<th>Interval training</th>
<th>Plyometrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport</td>
<td>Training Method</td>
<td></td>
</tr>
<tr>
<td>i High Jump</td>
<td></td>
<td>[1]</td>
</tr>
<tr>
<td>ii Cycling</td>
<td></td>
<td>[1]</td>
</tr>
<tr>
<td>iii Middle distance (e.g. 800m)</td>
<td></td>
<td>[1]</td>
</tr>
</tbody>
</table>

6. Mark with the letter X the side of the heart that is responsible for circulating oxygenated blood.

7. Which chambers of the heart are responsible for pumping blood out of the heart?

__________________________________________________________________________ [1]

8. Put the parts that carry oxygenated blood and deoxygenated blood under the respective column.

<table>
<thead>
<tr>
<th>Aorta</th>
<th>Right atrium</th>
<th>Right ventricle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vena cava</td>
<td>Left atrium</td>
<td>Pulmonary vein</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oxygenated blood</th>
<th>Deoxygenated blood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>[1]</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. In the figure below, mark with the letters X and Y, two points where the pulse may be taken.

![Figure with marked points X and Y]

10. Put the following components of blood next to the correct statement.

<table>
<thead>
<tr>
<th>Plasma</th>
<th>White blood cells</th>
<th>Red blood cells</th>
<th>Platelets</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Deals with disease and damage to the body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii</td>
<td>Helps to produce clotting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii</td>
<td>Carries oxygen and carbon dioxide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv</td>
<td>Carries hormones and nutrients</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. a Put the following words in the correct order to show how air travels through the air passages when breathing in. The first one has been done for you.

Pharynx Alveoli Trachea Bronchioles Bronchus Nasal Cavity

i NASAL CAVITY

ii ___________________________ [1]

iii ___________________________ [1]

iv ___________________________ [1]

v ___________________________ [1]

vi ___________________________ [1]

b Where does ‘gaseous exchange’ take place?

________________________________________________________________ [1]

c Mention the two main gases that are exchanged in the lungs.

i ___________________________ ii ___________________________ [2]
12. What happens to the following during ‘breathing in’? Underline the correct answer.

i Rib cage: moves up moves down does not move [1]

ii Diaphragm: relaxes contracts shape does not change [1]

iii Lungs: increase in size decrease in size remain the same [1]

Section D – Sports in Society [12 marks].
Answer ALL questions in this Section.
Answer ALL parts of EACH question.

1. The following diagram shows the people involved in a sports club.

Chairman/President
Treasurer
Secretary
Committee members
Coach
Club captain
Player

a Write the official next to the description of his/her role.

<table>
<thead>
<tr>
<th>Person in charge</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Leads the players.</td>
</tr>
<tr>
<td>ii</td>
<td>Deals with fixtures and other correspondence.</td>
</tr>
<tr>
<td>iii</td>
<td>Leads the club.</td>
</tr>
<tr>
<td>iv</td>
<td>Deals with training and fitness of the players.</td>
</tr>
</tbody>
</table>

b Mention ONE function of a sports club.

__________________________________________________________________________ [1]
c The club committee members may have different roles. Suggest ONE role which a member may have.

__________________________________________________________________________ [1]

2. a What does I.O.C. stand for?

I_____________ O_____________ C_____________ [1]

b Give TWO main functions of the I.O.C.

i ______________________________________________________________________ [1]

ii ______________________________________________________________________ [1]


__________________________________________________________________________ [1]

4. Mention TWO main responsibilities of the Kunsill Malti għall-Isport.

i ______________________________________________________________________ [1]

ii ______________________________________________________________________ [1]

5. Give ONE reason why the media feature athletes to promote their products.

__________________________________________________________________________ [1]

6. Magazines such as Hurrah Juventus and Forza Milan are two of the many specialist sport magazines published regularly. Suggest ONE reason why such magazines are popular.

__________________________________________________________________________ [1]