**Year 10  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>
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<tbody>
<tr>
<td>16</td>
<td>16</td>
<td>36</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>40% THEORY 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>GYM/DANCE (15%)</td>
<td>SWIMMING (15%)</td>
</tr>
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</table>
Section A – Movement and Physical Activities [16 marks].
Answer Question 1 (Skill Acquisition) and choose THREE questions from 2 to 9 in Section A. Answer ALL parts of the chosen question.

1. **Skill Acquisition**

   a. Classify the following skills either as ‘open’ or ‘closed’.  
      
      i. Free throw in basketball: _______________________  
      
      ii. Passing in a netball game: _______________________  
      
      iii. High jump: _______________________  
      
      iv. Gymnastics sequence: _______________________  

   b. In order to learn a skill, a performer needs to be motivated. Explain in your own words the term *intrinsic* motivation.  
      
      ______________________________________________________________________________________  
      
      [1]

   c. Give ONE reason why rules are important in a game.  
      
      ______________________________________________________________________________________  
      
      [1]

2. **Athletics**

   a. The high jump approach starts with a __________ run followed by running on a __________ into the take-off.  
      
      [½]

   b. The discus and shot put are both thrown from the throwing circle. Mention ONE rule that applies to both throwing events.  
      
      ______________________________________________________________________________________  
      
      [1]

   c. How many times does an 800m runner have to run around a standard track?  
      
      ________________  
      
      [½]

   d. How many members form a relay team in a track and field event? ________________  
      
      [½]

   e. Mention ONE important element one needs to consider during the acceleration phase of a 100M sprint.  
      
      ______________________________________________________________________________________  
      
      [1]
3. **Dance**

a  Underline the word which best describes when the energy used by a dancer remains constant.

i  Sustained

ii  Force

iii  Time

iv  Effort  [1]

b  Describe what is a light effort in a movement.

______________________________________________________________________________  [1]

c  Transference of weight is where the body weight changes position. Give **TWO** examples of transference of weight in dance.

i  ___________________________________________  [½]

ii  ___________________________________________  [½]

d  Which are the levels that an action can be performed at? (One of the three is already listed).

i  ____________________________  ii  middle  iii  ____________________________  [1]

4. **Football**

Underline the correct answer in questions a and b.

a  What is the referee’s decision when a goalkeeper commits a foul inside the penalty area with the intention to win the ball from an attacker, who had a clear scoring opportunity?

i  Red card and penalty.

ii  Penalty.

iii  Yellow card and an indirect freekick inside the box.

iv  Yellow card and penalty.  [1]

b  Which of the following may be regarded as the most attacking football system?

i  1-4-2-3-1

ii  1-4-3-3

iii  1-4-4-2

iv  1-4-5-1  [1]
c  Mention **TWO** ways how a team can be more effective in attack.

i  ____________________________________________  [1]

ii ____________________________________________  [1]

5.  **Gymnastics**

a  Mention **TWO** basic floor gymnastics skills.

i  ____________________  ii ____________________  [1]

b  Fill in the missing word:
A gymnast runs down a runway, hurdles onto a springboard and springs onto the
__________________  [1]

c  Give **ONE** progression which leads the gymnast to perform a good handstand.

______________________________________________________  [1]

d  What is the maximum time for a floor routine in gymnastics? (Underline the correct answer)

i  1 minute 20 seconds.  
ii  2 minutes.  
iii  1 minute 30 seconds.  
iv  1 minute.  [1]

6.  **Handball**

a  Half way through the second half of the game, the coach instructs his/her players to change the team’s defence formation from **6:0** to **5:1** defence.

i  Explain why a coach would opt for a **5:1** defence formation.

______________________________________________________  [1]

ii  Give **ONE** major disadvantage of a **5:1** defence formation.

______________________________________________________  [1]
Team A is ready for a throw off after conceding a goal. One player of team B is still in the opponents’ half. What is the correct referee’s decision? (Underline the correct answer).

i  Whistle for a fast throw off.
ii Give progressive punishment to the player of team B for delaying the throw off.
iii Give a yellow card to the player of team B for delaying the throw off.
iv Wait for the player of team B to be in his own half and then resume play.  [1]

c  How many substitutions is each team allowed during a game?

____________________________________________________ [½]

d  How many steps is a player allowed to perform with the ball in his hands?

____________________________________________________ [½]

7. Hockey

a  Mention **ONE** basic rule in hockey related to the hockey stick.

____________________________________________________ [1]

b  In a hockey team, who is allowed to touch the ball with any part of the body?

____________________________________________________ [1]

c  What is the limit on the number of substitution in a game? (Underline the correct answer).

i  6.
ii  3.
iii  5.
iv  No limit.  [1]

d  How many players form a hockey team?

____________________________________________________ [1]
8. **Swimming**

a  The following images show the start of the freestyle stroke in jumbled order. Under each image put the correct word.

<table>
<thead>
<tr>
<th>flight</th>
<th>grip</th>
<th>entry</th>
<th>take off</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ii</td>
<td>iii</td>
<td>iv</td>
</tr>
</tbody>
</table>

b  Explain the rule regarding touching the end of the pool in finishing a breaststroke race.

_________________________________________________________________[1]

c  Give **ONE** reason why keeping the body streamlined is important in swimming.

_________________________________________________________________[1]

9. **Netball**

a  Explain the centre pass rule.

_________________________________________________________________[1]

b  Which **TWO** positions (players) are allowed to shoot?

i ____________________________  ii ________________________________ [1]
c On the diagram of the netball court below, shade the area the Goal Defence can go into.

```
+---+---+
|   |   |
| O |   |
|   |   |
+---+---+
```


d Mention ONE role of the Goal Defence.

__________________________________________________________________

[1]

Section B – Health Related Fitness [16 marks].
Answer ALL questions in this Section.
Answer ALL parts of each question.

1. Read the passage and answer the questions that follow:

Most vegetarian’s diets enjoy a diet of grains, pulses, nuts, seeds, vegetables and fruits and are low or lacking in animal products. Typically, these diets are usually lower in saturated fat and contain more folate and fibre. Many studies have shown that vegetarians seem to have a lower risk of obesity, coronary heart disease, high blood pressure, and some forms of cancer. However, this kind of diet may lack protein, iron, zinc, calcium, and vitamin B.

a Explain why this type of diet may be ineffective to a weightlifter.

__________________________________________________________________________

__________________________________________________________________________

[2]

b Vitamin B is a water-soluble vitamin. Explain.

__________________________________________________________________________

[1]
c From the passage write the food substance/mineral/vitamin that:

i Can be a replacement for animal proteins sources [½]

ii Maintains strong bones [½]

iii Is known to raise cholesterol levels [½]

iv Assists wound healing [½]

v Necessary for the production of red blood cells [½]

vi Keeps the digestive system healthy [½]

d Suggest ONE problem that obesity may cause.

___________________________________________________________________ [1]

2. Exercise has a direct effect on energy balance through energy expenditure. Analyse the diagram and write what will happen to a person’s weight.

___________________________________________________________________ [1]

3. Timmy reduces training activity for 3 days and follows a carbohydrate loading programme. Give ONE reason how this process helps Timmy during the race.

___________________________________________________________________ [1]

4. Explain the function of water in our body.

___________________________________________________________________ [1]
5. a Explain how the intensity and duration of an exercise could determine which energy
system will be used during physical activity.

_________________________________________________________________
_________________________________________________________________

b Write in each box on the energy continuum below, a sporting activity which is
nearly 100% aerobic and another one which is nearly 100% anaerobic.

   100% Aerobic
     ↓
     .
   100% Anaerobic

[1]

6. Work out the approximate maximum heart rate of a 25-year-old person.

_________________________________________________________________

[1]

7. Explain how the recovery rate can be a good indicator of one’s endurance level.

_________________________________________________________________

[1]

8. Describe the term ‘basal metabolic rate’.

_________________________________________________________________

[1]

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

1. Peter decided to start attending a local fitness centre with the aim to keep fit.

   a Mention ONE way how each of the following principles of training can help him to
   follow a fitness programme in the correct way.

   i Specificity: ____________________________________________________________ [1]
   ii Overload: _____________________________________________________________ [1]
   iii Progression: __________________________________________________________ [1]
b) On the fourth week of his training programme, he sustained an injury. What principle of training should Peter take into consideration?

_________________________

[1]

2. State which type of training method is being referred to in each of the sentences in the table below. The first one is given as an example.

<table>
<thead>
<tr>
<th>Description of training method</th>
<th>Type of training method</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Swedish method of training, which alternates walking, jogging and fast running.</td>
<td>Fartlek training</td>
</tr>
<tr>
<td>i A type of training which involves phases of rest followed by phases of work.</td>
<td>[1]</td>
</tr>
<tr>
<td>ii A type of training which is not interrupted by phases of rest, as long distance jogging and swimming.</td>
<td>[1]</td>
</tr>
<tr>
<td>iii A type of training which increases muscle strength and may involve isotonic or isometric training.</td>
<td>[1]</td>
</tr>
</tbody>
</table>

3. A coach decides to include a ‘fitness circuit’ in one of his weekly training sessions to improve the overall fitness of his players. Mention FOUR exercises which he/she can include in such a circuit.

i ____________________________ ii ____________________________

iii ____________________________ iv ____________________________ [2]

4. The warm-up is an essential part of every training session. Give TWO reasons why it is important.

i ___________________________________________ [1]

ii ___________________________________________ [1]

5. For each of the situations in the table below, write down if the injuries are externally or internally caused.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Cause of injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>i A handball player broke his arm after a rough contact with one of his opponents.</td>
<td>[½]</td>
</tr>
<tr>
<td>ii A footballer pulled his hamstring due to an inadequate warm up.</td>
<td>[½]</td>
</tr>
<tr>
<td>iii A basketball player retired from competitive sport due to a chronic injury (overuse injury) in his knee.</td>
<td>[½]</td>
</tr>
<tr>
<td>iv A long-distance runner suffered blisters on her feet after wearing a new pair of jogging shoes.</td>
<td>[½]</td>
</tr>
</tbody>
</table>
6. Soft tissue injuries are normally treated using the **R.I.C.E.** treatment. What does each letter in this word stand for?

R: ____________ I: ____________ C: ____________ E: ________________ [2]

7. Complete the following sentences regarding the respiratory system.

i) During inspiration, the intercostal muscles ________________________________ [1]

ii) During expiration, the diaphragm ________________________________ [1]

iii) Gaseous exchange occurs in the ________________________________ [1]

iv) During gaseous exchange, ________________ is picked up and ________________ removed. [2]

v) VO2max is ________________________________ [1]

vi) During exercise, one’s breathing rate ________________________________ [1]

8. Study the diagram below and answer the following questions related to the heart.

![Heart Diagram]

a) Which is the first chamber that receives oxygen poor blood?

______________________________ [1]

b) What are the lower Chambers B and D called?

______________________________ [1]
c  Explain why chamber D has the thickest wall?
____________________________________________________________________ [1]

d  Label the aorta with the letter ‘E’. [1]

e  Label the pulmonary artery with the letter ‘F’. [1]

f  What is the **functional** difference between the pulmonary vein and other veins?
____________________________________________________________________ [1]

9.  Arteries, capillaries and veins are all blood vessels. Mention a characteristic of each.

i  Arteries: ____________________________________________________________ [1]

ii Capillaries: ________________________________________________________ [1]

iii Veins: ____________________________________________________________ [1]

10. In the table below, write down the type of blood cells which fits each of the descriptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Type of blood cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  These cells fight against infection.</td>
<td>[1]</td>
</tr>
<tr>
<td>ii These cells help to clot the blood and seal the skin.</td>
<td>[1]</td>
</tr>
<tr>
<td>iii These cells contain haemoglobin and transport oxygen.</td>
<td>[1]</td>
</tr>
</tbody>
</table>

11. One can locate the pulse rate by checking the temporal pulse. Mention **two** other areas where one can locate his/her own heart rate.

i  ___________________________________________ ii ______________________________________ [2]
Section D – Sports in Society [12 marks].
Answer ALL questions in this Section.
Answer ALL parts of each question.

1. What is the relationship between sport and the media? In other words, explain how sport and the media are dependant of each other.

______________________________________________________________________________________________________________
______________________________________________________________________________________________________________ [2]

2. One of the main means of media coverage of sports is the ‘Press’. The press consists of newspapers, sports magazines and books.

a Explain, by giving one example, how sports coverage of newspapers is different from that of sport specialist magazines.

______________________________________________________________________________________________________________
______________________________________________________________________________________________________________ [2]

b Some books feature particular sports events. Give TWO other different kind of books featuring sports.

i ______________________________________________________________________________________________________ [1]

ii _____________________________________________________________________________________________________ [1]

3. The Malta Olympic Committee assists prospective athletes in their preparation to represent Malta in international competitions such as the Olympic Games. Mention TWO other international competitions in which Malta is usually represented.

i ______________________________________ ii ______________________________________ [2]

4. The elections of Lightning Handball Club are currently underway to form the new committee for the following two years. The list below shows the positions that have been elected so far:

- Provisional list of committee members elected:
  - President.
  - Vice President.
  - Technical Director.
  - Public Relations Officer.
  - Two Members.

a Mention TWO other important vacant positions that still need to be elected.

i ______________________________________ ii ______________________________________ [2]
b Who has the right to vote in the club elections?

___________________________________________________________________ [1]


c Mention ONE role of the Vice President.

___________________________________________________________________ [1]