DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department of Curriculum Management
Educational Assessment Unit

Annual Examinations for Secondary Schools 2014

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>
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THEORY PAPER (80%)

40% THEORY PAPER

<table>
<thead>
<tr>
<th>ATHLETICS (15%)</th>
<th>GAMES (15%)</th>
<th>GYM/DANCE (15%)</th>
<th>SWIMMING (15%)</th>
<th>INTERVIEW (5%)</th>
<th>SCOUTING (5%)</th>
<th>SKILL ANALYSIS (5%)</th>
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45% PRACTICAL (CHOOSE 3)

15% PORTFOLIO

100% FINAL SCORE

Physical Education (Option) – Form 4 Secondary – Track 3 – 2014
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.

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

   ![Diagram showing open and closed skills]

   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  ___________________________  [1]
      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: _________

![Diagrams A, B, and C]

C [1]

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

![Court diagram]

[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.

![Handstand Diagram](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. For each condition mention ONE physical difficulty a person may experience.

   i Obesity: ___________________________________________________________ [1]
   ii Anorexia: __________________________________________________________ [1]

2. a Give the name of the most essential nutrient in the respective diets of a weightlifter and a marathon runner.

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

   [1]

   b Write down the energy system best suited for a:

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

   [1]

3. During a trekking activity, participants need to drink a lot of water. Briefly explain why.

   ___________________________________________________________ [1]

4. Why should water soluble vitamins be taken regularly?

   ___________________________________________________________ [1]

5. Describe how athletes may increase the amount of glycogen stored in their body before an important event.

   ___________________________________________________________ [1]

6. a An anaemic person needs an increased intake of a particular mineral. What is this mineral?

   ___________________________________________________________ [1]

   b What can a shortage of vitamin D lead to?

   ___________________________________________________________ [1]
7. The equation for anaerobic respiration is

Glucose + No Oxygen = Energy + Lactic Acid

Write the equation for the type of respiration that takes place in aerobic training.

Glucose + __________ = __________+ __________+ __________ [2]

8. Give TWO characteristics related to aerobic training.
   i ________________________________________________________________________ [1]
   ii _______________________________________________________________________ [1]

9. Explain how aerobic training may be beneficial for marathon runners.
   __________________________________________________________________________ [1]

10. What is oxygen uptake?
    _________________________________________________________________________ [1]

11. What happens to the muscles when there is an accumulation of lactic acid?
    __________________________________________________________________________ [1]

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

1. Explain the principle of progression.
   __________________________________________________________________________ [1]

2. David is finding his weekly running programme too easy. Suggest TWO ways how he could make his training programme more effective.
   i __________________________________________________________________________ [1]
   ii __________________________________________________________________________ [1]

3. Explain what happens to a muscle when it is immobilised for a long period of time.
   __________________________________________________________________________ [1]
4. Give **TWO** reasons why warm up is important before physical activity.

i. 

ii. 

[1]

[1]

5. For each of the following statements write down whether they are *internally* or *externally* caused injuries/conditions.

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

6. a Explain the difference between a **sprain** and a **strain**.

________________________________________________________________

________________________________________________________________

[2]

b Suggest the form of treatment appropriate for both a sprain and a strain.

________________________________________________________________

[1]

7. What type of fracture is shown in each of the following pictures:

i Fracture A: __________________________

ii Fracture B: _________________________

[1]

[1]
8. In the table below, name the type of training method used.

<table>
<thead>
<tr>
<th>Training Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Andrea runs for 45 minutes without rest.</td>
</tr>
<tr>
<td>ii Thomas sprints 200 metres for 6 times and rests for 90 seconds after each repetition.</td>
</tr>
<tr>
<td>iii Samuel uses the medicine ball to perform bounding exercises to improve his leg power.</td>
</tr>
<tr>
<td>iv Janice performs a number of different exercises in a given order on different stations.</td>
</tr>
</tbody>
</table>

9. Put the parts that carry oxygenated blood and deoxygenated blood under the respective columns.

<table>
<thead>
<tr>
<th>Aorta</th>
<th>Tricuspid Valve</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>
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</table>

10. Name the muscular wall that separates the right side from the left side of the heart.

___________________________________________________________________________

11. Mention ONE long term effect that training has on the heart.

___________________________________________________________________________

12. Which chamber of the heart is responsible for pumping blood out of the heart?

___________________________________________________________________________

13. One difference between arteries and veins is that arteries have thicker elastic walls. Name TWO other differences.

i ____________________________________________

ii ____________________________________________
14. Name the component of blood which is responsible for fighting disease and infections.

______________________________________________ [1]

15. The nasal passage is used to breathe in and out. Give TWO other functions of the nasal passage.

i  ___________________________________________________________ [1]

ii ___________________________________________________________ [1]

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

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>i</td>
<td>It moves down the trachea.</td>
</tr>
<tr>
<td>ii</td>
<td>It then enters through the bronchi.</td>
</tr>
<tr>
<td>iii</td>
<td>Air enters the body through the nasal cavity.</td>
</tr>
<tr>
<td>iv</td>
<td>It reaches the alveoli where gaseous exchange takes place.</td>
</tr>
<tr>
<td>v</td>
<td>It goes through the pharynx.</td>
</tr>
<tr>
<td>vi</td>
<td>It further moves into smaller tubes called bronchioles.</td>
</tr>
</tbody>
</table>

17. What is the function of the diaphragm?

______________________________________________ [1]

18. Complete the following.

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>i</td>
<td>This gas, when inhaled in, is carried by red blood cells to the working muscles.</td>
</tr>
<tr>
<td>ii</td>
<td>This gas is exhaled in greater quantities than inhaled.</td>
</tr>
<tr>
<td>iii</td>
<td>This is exhaled in higher volumes during exercise.</td>
</tr>
</tbody>
</table>
Section D – Sports in Society [12 marks].
Answer ALL questions in this Section.
Answer ALL parts of each question.

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

________________________________________________________________ [1]

2. The following diagram shows the organisational structure of a sports club.

   ![Organisational Structure Diagram]

   a Mention ONE duty of the treasurer.

   ______________________________________________________ [1]

   b What is the function of the public relations officer (P.R.O.) in a club?

   ______________________________________________________ [1]

   c Explain the main duty of:

   i The president.

   ______________________________________________________ [1]

   ii The club captain.

   ______________________________________________________ [1]

3. 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]
4. The Kunsill Malti għall-Isport (K.M.S.) is responsible for the administration of main sports facilities in Malta. Mention TWO other main responsibilities of the K.M.S.

i. __________________________________________________________ [1]

ii. __________________________________________________________ [1]

5. 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]

6. Mention ONE function of the Malta Olympic Committee (M.O.C.).

____________________________________________________________ [1]