INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the spaces provided on the Answer Booklet. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer three questions, at least one of which must be from Section A.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Do not write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The quality of your written communication will be assessed in questions that are indicated accordingly (*).
- The total number of marks for this paper is 105.
- This document consists of 8 pages. Any blank pages are indicated.

A calculator may be used for this paper.
1. **(a)** Outline the objectives of the 1933 Syllabus of physical training for state schools.
   
   State one reason why the 1933 Syllabus was replaced in the 1950s. [4]

   **(b)** Outline different types of activities associated with rural pre-industrial community sports festivals.

   State one pre-industrial activity that was taken into the public schools and adapted to a named athletics event. [5]

   **(c)** Describe how the technical development and values of football changed from stage one to stage three in nineteenth century public schools. [6]

   **(d)** Explain how increased free time and improved transport affected the emergence of rational recreations from 1850 to today. [20]
SECTION A
Comparative Studies (Option A2)

2 (a) Outline reasons why Australian Rules Football is so popular in Australia. [5]

(b) Outline Australian cultural values that impact on participation in physical activity in Australia. Describe how one of these cultural values originates from the country’s historical relationship with the UK. [5]

(c) Describe strategies to encourage mass participation in physical activity in the USA. Explain why opportunities for mass participation are considered to be fewer in the USA than in the UK. [5]

(d)* Compare how cultural factors impact on excellence in sport in the USA and the UK. [20]
SECTION B
Sports Psychology (Option B1)

3 (a) Describe the social learning and interactionist theories of personality. [4]

(b) Using practical examples, explain why people adopt different attitudes towards a balanced, active and healthy lifestyle. [5]

(c) Using practical examples, describe the possible causes of aggressive behaviour in sport. [6]

(d)* Using one example from sport, explain Vealey's model of sport confidence shown in Fig. 1 below.

Describe the methods that might be used to raise self-efficacy in sports performance. [20]

Fig. 1
4 (a) Fig. 2 shows a force/time graph of a single foot plant during the early stage of a 100 metre sprint.

![Force/Time Graph](image1)

**Fig. 2**

Define impulse and explain the shape of the force/time graph in Fig. 2.

(b) Fig. 3 shows the forces acting on a fast moving shuttle during flight.

![Forces Acting on Shuttle](image2)

**Fig. 3**

Using the information in Fig. 3, draw a parallelogram of forces diagram to show how to resolve the net force acting on a fast moving shuttle during this phase of its flight. Explain how this net force causes a deviation in the normal flight path of a fast moving shuttle.

(c) Define moment of inertia and explain the factors that affect the moment of inertia of a rotating body in sport. Explain why a runner has a flexed knee during the recovery phase of the stride action.
(d)* Fig. 4 shows the speed of a swimmer at set times after pushing off from the side of a pool at the start of a race.

<table>
<thead>
<tr>
<th>Time / secs</th>
<th>Speed / ms⁻¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0.5</td>
<td>3.0</td>
</tr>
<tr>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>3.5</td>
<td>2.0</td>
</tr>
<tr>
<td>4.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Fig. 4

Sketch a graph of speed against time for the swimmer.
The mass of the swimmer is 80 kg. For the first 0.5 seconds after pushing off from the side of the pool, calculate:
- the average acceleration of the swimmer
- the average net force acting on the swimmer.

Use Newton’s Laws of Motion to help explain the shape of the graph.
Analyse the methods used by performers to minimise air resistance, fluid friction or drag. [20]
5  (a) Define the term aerobic capacity.

Age and gender are two factors that affect VO₂ max. Identify three other factors that affect an individual's VO₂ max. [4]

(b) Describe an interval training session aimed at improving aerobic capacity. Explain how three physiological adaptations resulting from interval training contribute to a balanced, active and healthy lifestyle. [6]

(c) Discuss the use of RhEPO (recombinant erythropoietin) as a method of enhancing performance. [5]

(d) Explain factors that affect explosive strength. Devise a six week training programme to improve explosive strength. Explain how the programme would improve health and fitness. [20]