Examination Period 3: 2016/17

SPM300817N

Module Title: Applied Human Performance
Level: Six
Time Allowed: Two hours

Instructions to students:
- Enter your student number not your name on all answer books.
- Answer three out of five questions
- All questions are equally weighted
- Graph paper will be provided

<table>
<thead>
<tr>
<th>No. of Pages</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Questions</td>
<td>5</td>
</tr>
</tbody>
</table>
Answer three out of five questions

1. You have been asked to assess the aerobic capacity of an elite cyclist. Select an appropriate test for and outline the procedure used and explain the expected results to be achieved. Explain the physiological changes that occur during the test. Justify your choice of test.

2. You have been asked to run a test for aerobic fitness for a previously untrained individual prior to embarking on a low intensity training programme. Justify your choice of test and its expected outcomes. How would you ensure the test is ethical and that the safety and well-being of the subject is maintained?

3. You have been asked by the Moulton College Rugby Academy to run a battery of tests to produce a full fitness screening assessment for the squad. Describe and justify your selection of tests.

4. Plot a graph showing a typical lactate threshold curve. The graph should be fully labelled and contain relevant values and units of measurement. Explain how a 12 week high intensity training programme would alter the curve. With reference to the underlying physiology explain these changes.

5. Explain the graph below with reference to energy systems and mechanisms of muscle fatigue.

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**Figure 1 Wingate Test**
End of Paper