SUMMER EXAMINATIONS 2015

SPO100315N

MODULE TITLE  Physiological Function and Response
LEVEL          Four
TIME ALLOWED  Two hours

Instructions to students:

- Enter your student number not your name on all answer booklets.
- Answer TWO of the four questions.
- All questions are equally weighted.
- Begin each answer in a separate booklet; label each booklet clearly with the number of the question you are answering.
- The same material should not constitute a substantial part of more than one question.
- Neither books nor notes may be taken into the examination.
- You may not remove this examination paper from the examination room. For all purposes the examination paper remains the property of The University of Northampton.

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ANSWER TWO OF THE FOLLOWING QUESTIONS

1. Describe the structure and breakdown of an ATP molecule and then explain the breakdown of a glucose molecule using the 2 anaerobic systems to resynthesize ATP.

2. Describe the structure of the heart and explain how the mechanical and neurological events during the cardiac cycle results in the movement of blood through the heart.

3. Define and using a graph, illustrate lactate threshold and onset blood lactate (OBLA) for untrained and trained individuals. Discuss the importance of lactate threshold / VO$_{2\text{MAX}}$ to endurance performance.

4. Describe cardiac output and explain how changes to cardiac output are achieved during exercise.

END OF PAPER