Summer Examinations 2016

SPO100316N

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 books.
- Answer **two** of the **four** questions.
- All questions are equally weighted.
- Begin each question in a separate answer book; label each answer book clearly with the number of the question you are answering.
- Neither books nor notes may be taken into the examination.
- Graph paper provided.
- The same material should not constitute a substantial part of more than one question.
- Students are **not** permitted to 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. Using the graph paper provided, draw the typical lactate threshold and onset blood lactate (OBLA) for untrained and trained individuals. Discuss the cause for the excessive rate of lactate release into the blood during intense exercise.

2. Describe the structure of an ATP molecule and then explain the process of ATP resynthesis using the two anaerobic energy systems.

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

4. Describe the structure and function of the respiratory system and explain the three gaseous laws and how they influence ventilation and respiration.

End of Paper