Summer Examinations 2015

SPM300815N

MODULE TITLE       Applied Human Performance
LEVEL              Six
TIME ALLOWED       Two hours

Instructions to students:

- Enter your student number **not** your name on all answer booklets.
- Answer **THREE** of the five 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 **THREE** of the following questions.

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

2. A group of previously untrained individuals are going to enter a marathon and will be starting off on a low intensity training programme. Select and justify an appropriate series of tests that would be used to assess the fitness of this group. How would you ensure that the tests are ethical and that the safety of the individual is maintained during the testing process?

3. Moulton College Triathlon Academy has approached you to run a series of tests that could be used to enable a full fitness screening assessment to be made for the academy. Justify your selection of tests for this type of young athlete.

4. Describe and plot a typical lactate threshold curve ensuring that the appropriate units are used and typical values indicated. Explain how a 12 week high intensity training programme would alter the curve and explain these changes with reference to the underlying physiology.

5. Explain the Conconi deflection point used in heart rate based tests and its relevance to training. Also, explain the physiological changes that occur during the test. You can use a graph to help illustrate your understanding.

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**END OF PAPER**