Examination Period 3: 2016/17

Module Title: Introduction to Fitness Training Methods
Level: Four
Time Allowed: Two hours

Instructions to students:
- Enter your student number not your name on all answer books.
- Answer two out of 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.
- The same material should not constitute a substantial part of more than one question.
- Neither books nor notes may be taken into the examination.

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Answer two out of the four questions.

1. Describe the three main types of endurance training (a. slow, long distance, b. threshold training and c. high intensity interval training) and how these training methods can improve athletic performance. Then provide a detailed explanation of the physiological adaptations associated with each type of training.

2. Provide a detailed explanation of the application of training principles (individuality, specificity, overload, progression, recovery, variation and reversibility) to enhance fitness levels and performance. Then explain the physiological mechanisms of specificity and cross-training, providing examples of situations in which cross-training is beneficial.

3. Describe and explain the force velocity curve with relation to strength and power using sporting examples where applicable. Then provide a description of how this information may be practically applied and useful for a sport scientist or coach involved in elite sport.

4. Identify and describe the three main models of body composition. Then explain at least four ways to measure body composition identifying which one of the four is considered the gold standard measure (i.e. best) and why.