ST MARY’S UNIVERSITY

TWICKENHAM, LONDON

MSc Degree Examination students registered for

Level **SEVEN**

Title: **Advanced Sport and Exercise Physiology**

Code: **ASE7002**

Semester: **Resit**

Date: **01 July 2019**

Time: **09:30-11:30am**

TIME ALLOWED: **TWO** HOURS

Answer **TWO** questions, each in a **SEPARATE** answer booklet. Calculators can be used during the exam

1. **a)** Describe the differences between heat acclimation and acclimatization, providing examples of typical protocols for each (50%). **b)** Explain what types of physiological adaptations might occur across a 2-week acclimation or acclimatization process (50%).
2. **a)** Describe the physiological determinants of high-intensity, intermittent exercise performance (50%) and **b)** what the likely causes of fatigue are during this type of event (50%).
3. **a)** Explain what is meant by peripheral and central fatigue (50%) and **b)** Describe one ‘model’ of fatigue that encompasses both peripheral and central factors (50%).
4. **a)** In relation to the neuromuscular system, explain what is meant by ‘Mmax’ and provide a basic process of how this can be identified in a laboratory environment (50%). **b)** Describe the process of twitch interpolation and how this can be used to determine acute exercise-induced fatigue (50%).

**END OF EXAMINATION**