ST MARY’S UNIVERSITY

TWICKENHAM, LONDON

BA/BSc/BA (ITT) Degree Examination students registered for

Level **SIX**

Title: **Clinical Exercise Physiology**

Code: **HEP6007**

Semester: **TWO**

Date: **May 14th 2019**

Time: **09.30- 11.30 AM**

TIME ALLOWED: **TWO** HOURS

Answer any **FOUR** questions. Do **NOT** answer more than **FOUR** questions.

1. Critically discuss the role of exercise as a weight loss strategy for overweight and obese individuals. Use research to support your answer. (25 Marks)
2. During a graded exercise test (GXT) the ‘ventilatory threshold’ (VT1) can be identified. Explain the physiological mechanisms that cause this threshold to be reached during incremental exercise. Critically discuss how this threshold can be used as an indicator of cardiorespiratory fitness. (25 Marks)
3. In relation to the endothelium, discuss the physiological rationale for prescribing exercise to a cardiovascular disease patient. Where possible, use research to support your answer. (25 Marks)
4. Define and describe a physiological condition that can affect an elderly patient’s muscular strength and endurance. Discuss how you would approach testing the muscular fitness of a patient with this condition. (25 Marks)
5. During a graded exercise test, with reference to gas exchange measures, discuss why an RER value of 1.1 would indicate the individual is exercising at a high intensity. (25 Marks)
6. With reference to research, critically discuss the role of resistance exercise for the management of hypertension. Use research to support your answer. (25 Marks)

**END OF EXAMINATION**