

UNIVERSITY OF BOLTON
SCHOOL OF SPORT AND BIOLOGICAL
SCIENCES
SPORT REHABILITATION PATHWAY
SEMESTER TWO WRITTEN EXAMINATION
2018/2019
HUMAN PHYSIOLOGY
MODULE NO. SRB4003

Date: Tuesday 21 May 2019

Time: 10.00 am – 11.00 am

INSTRUCTIONS TO CANDIDATES:

You have 1 hour for this examination paper.

There are 5 written-answer questions in this paper with a total of 40 marks

Answer ALL questions

School of Sport and Biological Sciences
Sports Rehabilitation Pathway
Semester Two Written Examinations 2018/2019
Human Physiology
Module No. SRB4003

1. Provide a detailed description of the muscle contraction process. Include in your answer the three stages of this process: Neuromuscular Transmission; Excitation Contraction Coupling; Sliding Filament Theory.

(12 marks)

2. Describe the Muscle Healing Phases including Degeneration, Inflammation, Regeneration and Fibrosis paying close attention to scar tissue formation.

(8 marks)

3. Describe the characteristics of, and differences between compact and cancellous bone. Make reference to the functions that each bone type plays, and their location within the body.

(5 marks)

4. Describe how the body maintains a homeostatic balance of core body temperature when exposed to a cold environment. In your answer refer to the neural and endocrine inputs responsible for this control.

(10 marks)

5. Describe the organisation of the nervous system making reference to the main functions and the voluntary or involuntary mechanisms of each of the sub-systems you identify.

(5 marks)

End of Questions