Examination Period 3: 2017/18

PSC100418NA

Module Title: Anatomy and Physiology for Pre-hospital Care
Level: Four
Time Allowed: Two hours

Instructions to students:

• Enter your student number **not** your name on all answer books.
• Answer **all** questions.
• Begin each question in a separate answer book; label each answer book clearly with the number of the question you are answering.
• Students are **not** permitted to remove this examination paper from the examination room. For all purposes the examination paper remains the property of the University of Northampton.

<table>
<thead>
<tr>
<th>No. of Pages</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Questions</td>
<td>5</td>
</tr>
</tbody>
</table>
1. Explain the role of renin, angiotensin, aldosterone and ADH in maintaining homeostasis. (20 marks)

2. Describe the sliding filament theory of cardiac muscle contraction and its relation to the Frank-Starling law of the heart. (20 marks)

3. Describe the pathway of signal transduction from the motor cortex to the neuromuscular junction in skeletal muscle contraction. (20 marks)

4. Compare and contrast the anatomical and physiological differences in the adult and paediatric airway. (20 marks)

5. Describe the physiology of gastric acid secretion (20 marks)

End of Paper