



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. (General) Degree in Health Promotion
First Year – Semester I Examination – June/July 2018**

HPT 1201 – BASIC PHYSIOLOGY

Time: Two (2) hours

Answer ALL questions.

1. a) Describe the role of human blood cells. (30 marks)
b) Explain the blood clotting process. (40 marks)
c) Describe briefly, the body fluid compartments. (30 marks)
2. a) Define the term stroke volume in heart dynamics. (20 marks)
b) Explain how both nerves and hormones control cardiac output under different physiological conditions. (50 marks)
c) Describe in brief how blood pressure is generated by the human heart. (30 marks)
3. a) Explain the stages of swallowing in human digestion. (30 marks)
b) Explain the major functions of the stomach in the human digestive system. (40 marks)
c) Comment on the role of the pancreas in human digestion. (30 marks)
4. a) Draw a labeled diagram of a human nephron. (30 marks)
b) Describe the processes of urine production in the human urinary system. (50 marks)
c) Explain briefly what is meant by the glomerular filtration rate (GFR). (20 marks)

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