

Section II

35 marks

Attempt Questions 16–20

Allow about 50 minutes for this section

Answer the questions in the spaces provided. These spaces provide guidance for the expected length of response.

Question 16 (6 marks)

- (a) Define the terms *anatomy* and *physiology*. 2

Anatomy: is the body parts and how they function
Physiology: is the function of the muscles and bones

- (b) *Homeostasis* is a term that describes the state of physiological balance within the body. 4

Provide an example of *homeostasis* and explain how it works.

The control of carbon dioxide in the blood and lungs. As oxygen is inhaled into the lungs and then joins to haemoglobin, it then turns to carbon dioxide. Carbon dioxide is a waste product and affects the acidic levels of the blood. As it travels around the body in the blood supply it then reaches the lungs again and is exhaled out of the lungs as CO_2 . The cycle then continues.