

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
The term anatomy defines the structure and function of body systems; where as physiology is the deals with the mechanics of an individual e.g. walking around uses muscles and bones or the process of body functions e.g. pumping blood around body.
- (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.

An example of homeostasis would be the use of regulatory cells. These cells perform such actions when an individual is either too hot or cold. Receptor cells manipulate body functions such as making skin cells rise to trap warm air "goosebumps" or to produce sweat to cool them down. If this action doesn't work it becomes negative feedback and further actions are undertaken.