

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 refers to the structure and location of bones, muscles, organs, glands etc. etc. Physiology refers to the function of the body and its parts and how each system works together.

- (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.

Temperature regulation is important in maintaining a constant internal environment and life. It is maintained by the sensory perceptions in the skin. Normal range of body temperature is 37°C. When it falls and has a chance of becoming too cold (hypothermia) the skin shivers to increase friction and temperature. When too hot (hyperthermia) the sweat glands release liquid to cool the body down.