

The Endocrine System

84 Marks

Question 1

10. (a) (i) What term is used for glands that secrete hormones?
- (ii) How do these glands differ from those that do not secrete hormones?
- (iii) Explain why the pancreas may be described as a *dual-function* gland. (9)
- (b) Answer the following by reference to hormones, other than sex hormones, which you have encountered in the course of your studies.
- (i) What is the chemical nature of many hormones?
- (ii) In the case of **each** of **two named** hormones secreted in the human body state:
- The precise location of the gland that secretes it.
 - A function of the hormone.
- (iii) In the case of **one** of the hormones referred to in part (b) (ii):
- Give a deficiency symptom.
 - Give a symptom of excess secretion.
 - Give a corrective measure for **either** its deficiency **or** its excess, clearly stating which you have chosen.
- (iv) Explain why hormonal responses are slower than nervous responses. (27)

Question 2

- (c) (i) Suggest **two** situations which may result in a drop in the water content of the blood.
- (ii) When the water content of the blood drops a hormone is released. Name this hormone and the endocrine gland from which it is secreted.
- (iii) Give a precise target area for this hormone. How does the hormone reach the target area?
- (iv) Explain the role of the hormone at its target area, when the water content of the blood is low. (24)

Question 3

- (c) (i) What term is used to describe the glands that secrete hormones in the human body?
- (ii)
 - Name a hormone-producing gland in the human body.
 - Where in the body is the gland located?
 - Name a hormone that this gland secretes.
 - State a role of this hormone.
 - Describe what happens if the body experiences a deficiency of this hormone.
- (iii) Give **two** examples of the use of hormone supplements. (24)