Homeostasis Basics and Thermoregulation Assignment

Complete the following questions **in full sentences,** unless stated otherwise.

**Definitions**  
Define the following terms (knowledge, 1 mark each)

1. Homeostasis -
2. Thermoregulation -
3. Exocrine Gland System -
4. Endocrine Gland System -
5. Negative Feedback Loop -
6. Positive Feedback Loop -

**Short Answer**

1. The Pancreas is responsible for the production of Insulin and Glucagon, which are both hormones that help control our body’s blood glucose level, and essentially keep us alive.
   1. Are these hormones a part of the Exocrine or Endocrine gland system?
   2. What would an individual who has an ineffective pancreas do in order to maintain blood sugar levels and stay alive? Hint: This is a very common genetic disease; people with this disease live perfectly normal lives. (4 marks, knowledge)
2. How do the Negative and Positive feedback loops differ? Does the body require both, if so why? Support your argument with an example. (Thinking / Investigation, 4 marks)
3. Why do we feel pain? Why is it important in our lives? Use an example and draw a flow chart to help your explanation. (Communication, 4 marks)