**Question 38 (2016 Melville SHS Sem I Paper) (11 marks)**

Type I diabetes affects around 120,000 Australians. It is caused when the body’s immune system attacks its own cells and prevents parts of the endocrine system from functioning normally.

1. Insulin is a protein based hormone. Explain how these types of hormones work. (3 marks)

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1. Describe how insulin controls glucose levels in the body. (3 marks)

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1. One of the major concerns for a person suffering from Type I diabetes is becoming hyperglycaemic if they consume too much sugar.
2. Describe two symptoms that a person would exhibit if they were hyperglycaemic. (2 marks)

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1. Explain how blood glucose levels would be maintained if a non-diabetic person had not eaten a meal for over 12 hours. (3 marks)

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