**HUMAN BIOLOGY – YEAR 12**

**TASK 2 – ENDOCRINE SYSTEM DISORDERS VALIDATION TEST**

**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ WEIGHTING: 10%**

**Part B – In-class validation questions (35 marks)**

This section consists of four (4) questions. Answer **ALL** of the parts to each question on the lined paper provided.

You may illustrate your answers with diagrams where appropriate.

**You have recently found out that a number of people in your extended family have been suffering from Endocrine System Disorders. This worries your parents so with the knowledge learnt in Human Biology you help them to understand what is happening.**

1. With the aid of a negative feedback loop diagram explain how the body usually maintains hormones. You may refer to one of the hormones you researched to help your explanation.

(6 marks)

1. Your Aunt Mildred has been taking medication for Hypothyroidism.
2. What hormone is not being kept in balance and name four symptoms of the condition?

(3 marks)

1. Explain how the hormone is usually maintained in the body. (8 marks)
2. Describe how hormone replacement therapy/medications can be used to treat the condition.

(3 marks)

3. Cousin Dave has not been feeling 100% of late. He stated to your dad that he has not felt as strong when he has been to the gym, his skin bruises easily, he feels like he has put weight on around his face and abdomen and has felt a bit depressed and anxious at work.

1. Name the hormone that is imbalanced causing Cousin Dave’s condition. (1 mark)
2. What condition do you think Cousin Dave is suffering from? Explain why. (3 marks)
3. Explain what can be done to treat the condition you think Cousin Dave is suffering from.

(4 marks)

4. Your Grandfather on your mum’s side was recently diagnosed with a pituitary tumour. A hormone test was performed and his cortisol level was within the normal range.

1. What hormone will likely to be affected by a pituitary tumour other than cortisol? (1 mark)
2. How would you test for the hormone level in the body? (1 mark)
3. He has found out that he has too little of the hormone in his body:  
   * 1. What are two symptoms/chronic disease that are caused by this? (2 marks)
     2. Explain why receiving hormone therapy would improve your Grandfather’s quality of life.

(3 marks)