Homework 7: Electronic systems processing

# 1. Which one of the following components will give a digital signal? [1]

⬨ Microphone

⬨ Light dependent resistor

⬨ Toggle switch

⬨ Thermistor

# 2. Using notes and sketches, explain the characteristics of the following types of signal. [4]

|  |  |
| --- | --- |
| **Analogue:** | **Digital:** |
|  |  |

# 3. Explain how a microcontroller can be programmed. [2]

# 4. A digital egg timer uses an input, process and output.

# (a) Suggest an appropriate input component. [1]

# (b) Suggest an appropriate output component. [1]

# (c) Circle the most appropriate device below to be used for the timing process. [1]

**Monostable**

**Astable**

Total 10 marks