Name: Class: Mark:

1. (a) Explain the purpose of the CPU. [1]

(b) Here are some statements about the CPU of a computer.

 Tick **one** box in each row to show whether the statement is true or false. [4]

|  |  |  |
| --- | --- | --- |
| **Statement** | **True** | **False** |
| CPU stands for Central Programming Unit |  |  |
| The CPU carries out arithmetic and logical instructions |  |  |
| Registers are a type of super-fast memory in the CPU |  |  |
| The Von Neumann architecture only holds data in memory |  |  |

(c) The CPU features a number of registers. Complete the table and describe the purpose of each register [4]

|  |  |
| --- | --- |
| **Register** | **Purpose** |
| Memory Address Register |  |
| Memory Data Register |  |
| Current Instruction Register |  |
| Program Counter |  |
| Accumulator |  |

2. The CPU operates on a cycle.

(a) What is the name of this cycle? [1]

(b) Explain the different stages of the cycle.
You may draw a diagram to help with your explanation. [5]

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|  |

[Total 15 marks]