WS CompSci

**CIE 0984 – U3 Computer hardware and storage**

**FDE questions**

# Agree-Disagree Questions

1. The accumulator is a temporary storage unit within the CPU. (Agree/Disagree) **[1]**
2. The ALU performs both arithmetic and logical operations within the CPU. (Agree/Disagree) **[1]**
3. Registers are used to store data and instructions temporarily during CPU operations. (Agree/Disagree) **[1]**
4. The instruction register holds the address of the next instruction to be executed. (Agree/Disagree) **[1]**
5. The control unit manages the flow of data between the CPU and external devices. (Agree/Disagree) **[1]**

# Open-Ended Questions

1. Describe the primary function of the accumulator in the CPU. **[2]**
2. How does the ALU differentiate between arithmetic and logical operations? **[2]**
3. Explain the significance of the program counter in the fetch-decode-execute cycle. **[2]**
4. Discuss the role of the memory address register in memory access operations. **[2]**
5. How do registers contribute to the overall efficiency of CPU operations? **[2]**
6. Explain the process of loading data into the accumulator for arithmetic operations. **[2]**
7. Discuss the importance of flags in the operation of the CPU. **[2]**
8. How does the instruction register aid in the execution of machine instructions? **[2]**
9. Describe the relationship between the control unit and the execution of instructions within the CPU. **[2]**
10. Discuss the impact of register size and architecture on CPU performance and efficiency. **[2]**