**WORKSHEET 2-1:**

TOPIC

2

**COMPUTER ARCHITECTURE**



**TIME TO COMPLETE: 1 HOUR**

Please do the work either on the sheet or by hand and show it, that way I know you’re able to replicate it on the exam.

1. 2.1.1 Outline the architecture of the central processing unit (CPU) and the functions of the arithmetic logic unit (ALU) and the control unit (CU) and the registers within the CPU.

1. Draw a diagram of a CPU include the Control Unit(CU), Arithmetic Logic Unit(ALU), Memory Address Register(MAR), Memory Buffer Register (MBR), Control Bus, Address Bus, Data Bus, and Memory, then describe each devices role within the CPU.

2.1.2 Describe primary memory.

1. Compare and contrast RAM and ROM.
2. Describe the difference between SRAM and DRAM.

2.1.3 Explain the use of cache memory.

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2.1.4 Explain the machine instruction cycle.

1. Draw a diagram of the machine instruction cycle then explain the four steps: fetch, decode, execute, and store.

Secondary Memory

2.1.5 Identify the need for persistent storage.

1. Why does a computer need persistent storage?

Operating Systems

2.1.6 Describe the main functions of an operating system.

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2.1.7 Outline the use of a range of application software.

1. What role do applications software play in a computer system?

2.1.8 Identify common features of applications.

1. List some common features of application software.