**Introduction to Computer Systems and Platform Technologies**

Study Period 3, 2021 – CPT160

Assignment 2

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| **Student Name:** | Adam Mutimer |
| **Student Number:** | S3875753 |

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[3. Give details of purchasing a 1TB NVMe/M.2. Details include the price and its specifications. E.g., read/write speeds. You must also describe the type of flash memory e.g., SLC or MLC, EMLC, TLC, QLC etc. 3](#_Toc88465354)

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[a) Explain the concept of virtual memory. Do you worry about if you are going to have enough virtual memory addresses (explain your answer)? Do you worry about if you are going to have enough physical addresses, or is there going to be any concern in terms of performance (explain your answer)? 3](#_Toc88465357)

[b) Assuming a cache miss, a data item is requested with its virtual memory address. Illustrate clearly how the corresponding page is located by using the page table directly. Explain if there are performance issues with the direct use of page table, and how the performance can be improved 3](#_Toc88465358)

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# Part A: System Architecture – 120 Marks

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# Part C: Recent Technology – 40 Marks

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# Bibliography – 26 Marks