NOTE: Use of internet is not permitted, calculators are permitted, and your answers must include worked solutions. If you require extra sheet(s) please write your name and student number at the top of each additional sheet.

**Part A**

**Objective**

Using ASCII character codes

|  |
| --- |
| 1. Convert the string ‘SETU’ to Base16 using equivalent ASCII character codes |
|  |
| 1. What are the ASCII character values for: a. Ctrl C   b. ‘A’  c. ‘a’  d. 0 (zero)  e. 4 |
|  |

**Part B**

**Objective**

Convert numbers to IEEE Single Precision Floating Point representation

|  |
| --- |
| 1. Convert the number 443.562510 to an IEEE Single Precision Floating Point number (show all conversion steps) |
|  |

|  |
| --- |
| 1. Convert the number -0.062562510 to an IEEE Single Precision Floating Point number (show all conversion steps) |
|  |

**Part C**

**Objective**

Convert IEEE Single Precision Floating Point numbers to Base10

|  |
| --- |
| 1. The number C5AD9C0016 is a hexadecimal representation of an IEEE Single Precision Floating Point. What Base10 number does the IEEE number represent? |
|  |

|  |
| --- |
| 1. What number does the IEEE Single Point Precision format number below represent? |
|  |

Hand up this practical report at the end of session and ensure it has been checked

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name** | **Karolis Grigaliunas** | **Student Number** | **C00287940** |
| **Date** | **11/10/23** | **Checked** |  |
| **Group** | **A / B** |  |  |

Extra Sheet Student Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_