

## CS 232 Operating Systems – Fall 2023

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### Quiz 2 - Solution

Name: \_\_\_\_\_

Date: 30 August 2023

Regn. No. : \_\_\_\_\_

Circle the correct answer.

Q1) The register which contains the data to be written into or read out of the addressed location is known as? 1.5 marks

- (a) memory data register
- (b) memory address register
- (c) program counter
- (d) index register

Q2) In magnetic disks data is organized on the platter in a concentric sets or rings called? 1.5 marks

- (a) blocks
- (b) sectors
- (c) tracks
- (d) head

Q3) When we move from the outer most track to the innermost track in a magnetic disk, the density? 1.5 marks

- (a) increases
- (b) decreases
- (c) remains the same
- (d) either remains same or decreases

Q4) Which technique is preferable for transferring a large amount of data to and from a memory in a short time? 1.5 marks

- (a) Interrupt driven I/O
- (b) programmed I/O
- (c) DMA
- (d) none of the options

Q5) Write C/C++ function FindSecondMaximum to return the second largest value in a given float data array? The functions declaration is given below you should define the function body only. 4 marks

```
float FindSecondMaximum(float* array, const int N)
{
    float max = -FLT_MAX;
    float prev_max = -FLT_MAX;
    for(int i=0; i<N; ++i)
    {
        if(array[i] > max)
        {
            prev_max = max;
            max = array[i];
        }
        else if(array[i]>prev_max && array[i]!=max)
        {
            prev_max = array[i];
        }
    }
    return prev_max;
}
```