## CSE 305 - Computer Architecture

Class Test - 1 (Total Marks: 20)

## Student No:

1. What is Moore's Law? What do you mean by response time and throughput? (5)
2. The following table shows the numbers of instructions for a program.

| Arithmetic | Store | Load | Branch | Total |
| :---: | :---: | :---: | :---: | :---: |
| 500 | 50 | 100 | 50 | 700 |

The following table shows the number of cycles taken by each instruction.

| Arithmetic | Store | Load | Branch |
| :---: | :---: | :---: | :---: |
| 1 | 5 | 5 | 2 |

a. What is the execution time of the program in a 2 GHz processor? (5)
b. What is the CPI of the program? (5)
c. If the number of store instructions can be reduced by half, what is the speed-up and CPI? (5)

