

COAL
BS CS Fall 2022
Quiz 9

Time allowed: 10 min

Total marks: 15

Roll Number: _____

Name: _____

Q1: [3]

A computer has IR register of 16 bits. 11 bits are for address, 3 bits are for op-code and 2 bits are for register reference?

Max size of memory:

Number of operation:

Number of registers:

Q2: [3]

In basic computer, instruction loaded in IR is “**B3A1**”. In execution of this instruction how many timing bits will be required? ($T_0 - T_N$)

Q3: [3]

Write the RTL without control bits for following table?

S_2	S_1	S_0	LD of Register	Memory	Adder
1	1	1	AR	Read	-----

Q4: [3]

Assume in the Basic Computer, **D7 = 0, I=0, T3 = 1**. What is going to be happened under these conditions?

Q5: [3]

Design the control input for the following memory reference instruction.

D_6T_6 : IF ($AC \neq 0$), then $PC \leftarrow PC+1$